MEMORANDUM

TO: Interested Parties / Applicant Certified Mail Z 250 236 944

FROM: Robert F. Holm, PhD. Administrator
City of Indianapolis, Environmental Resources Management Division

DATE: June 1, 1999

SUBJECT: Notice of Decision - **FESOP Approval for Citizens Gas and Coke Utility, (Liquefied Natural Gas Plant - North), Indianapolis F097-10018-00141**

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, ISTA Building, 150 W. Market Street, Suite 618, Indianapolis, IN 46204, within fifteen (15) days from the date of receipt of this notice. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing: (1) The date the document is delivered to the Office of Environmental Adjudication (OEA), (2) The date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail. (3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and the following: (1) the name and address of the person making the request; (2) the interest of the person making the request; (3) identification of any persons represented by the person making the request; (4) the reasons, with particularity, for the request; (5) the issues, with particularity, proposed for consideration at any hearing; (6) identification of the terms and conditions which, in the judgement of the person making the request, would e appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

Pursuant to IC 4-21.5-3-5(d), the Office of Environmental Adjudication will provide you with notice of any prehearing conferences, preliminary hearing, hearings, stays, or orders disposing of the review of this decision if a written request is submitted to the Office of Environmental Adjudication at the above address. If you have procedural or scheduling questions regarding your petition, you may contact the Office of Environmental Adjudication at 317-232-8591. If you have any other questions regarding the enclosed document, please contact the Office of Air Management (OAM) at 317-233-0178.

Attachment - FESOP
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FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)

OFFICE OF AIR MANAGEMENT
and
INDIANAPOLIS ENVIRONMENTAL RESOURCES MANAGEMENT DIVISION
AIR QUALITY MANAGEMENT SECTION

Citizens Gas and Coke Utility
(LNG North)
4536 West 86th Street
Indianapolis, Indiana 46268

Citizens Gas and Coke Utility (herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: F097-10018-00141	
Issued by: Robert F. Holm, Administrator Environmental Resources Management Division	Issuance Date:

SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM) and the Indianapolis Environmental Resources Management Division (ERMD). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-8-3(b)]

The Permittee owns and operates a liquefied natural gas storage facility under a Standard Industrial Classification Code (SIC) of 4922 (establishments engaged in the transmission and/or storage of natural gas for sale).

Authorized Individual:	Lindsay Lindgren
Source Address:	4536 West 86th Street, Indianapolis, Indiana, 46268
Mailing Address:	2020 North Meridian Street, Indianapolis, Indiana 46204
Telephone Number:	(317) 927-6016 (Mr. Pat Clark, Manager of LNG Plants)
SIC Code:	4922
County Location:	Marion County
County Status:	Attainment for all criteria pollutants
Source Status:	Federally Enforceable State Operating Permit (FESOP) Minor Source, under PSD and Emission Offset Rules;

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This stationary source consists of the following emission units and pollution control devices:

(a) Facility Description [326 IAC 2-8-4(10)] One (1) Allison simple cycle Gas Turbine for refrigerant compressor identified as Emission Unit ID 01 and exhausting at Stack Vent ID 01. Natural gas fired at 38.0 million Btu per hour maximum heat input. Model number 501-KC5. Installation date of 1990. Includes non HAP fugitive VOC emissions from the gas liquefaction compressor/heat exchange system.

(b) Facility Description [326 IAC 2-8-4(10)] One (1) T-Thermal water submerged Vaporizer for the vaporization of liquefied natural gas identified as Emission Unit ID 02 and exhausting at Stack/Vent ID 02-A1 and 02-A2. Includes six (6) natural gas fired burners with a combined total heat input capacity of 72.0 million Btu per hour. Installation date of 1990.

(c) Facility Description [326 IAC 2-8-4(10)] One (1) T-Thermal water submerged Vaporizer for the vaporization of liquefied natural gas identified as Emission Unit ID 03 and exhausting at Stack/Vent ID 03-B1 and 03-B2. Includes six (6) natural gas fired burners with a combined total heat input capacity of 72.0 million Btu per hour. Installation date of 1990.

(d) Facility Description [326 IAC 2-8-4(10)] One (1) T-Thermal water submerged Vaporizer for the vaporization of liquefied natural gas identified as Emission Unit ID 04 and exhausting at Stack/Vent ID 04-C1 and 04-C2. Includes six (6) natural gas fired burners with a combined total heat input capacity of 72.0 million Btu per hour. Installation date of 1990.

A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):

(1) Natural gas fired combustion sources with heat input equal to or less than ten million Btu per hour.
  (a) Salt bath heater for mole sieve regeneration, operated while natural gas is being liquefied. Identified as Emission Unit ID SBH-01 and natural gas fired at maximum heat input of 6.5 million Btu per hour.

(2) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to 1 % by volume.

(3) Process vessel degassing and cleaning to prepare for internal repairs.

(4) Purging of gas lines and vessels that is related to routine maintenance and repair of buildings, structures, or vehicles at the source where air emissions from those activities would not be associated with any production process.

(5) Equipment used to collect any material that might be released during a malfunction, process upset or spill cleanup including catch tanks, temporary liquid separators, tanks and fluid handling equipment.

(6) On site fire and emergency response training approved by the department.

(7) Purge double block and bleed valves.

(8) Stationary fire pumps.
  (a) Caterpillar diesel fuel fired emergency fire pump identified as Emission Unit ID EFP-01. Rated at 460 horsepower and operated during emergencies, fire training and periodic testing.

(9) Natural gas turbines or reciprocating engines not exceeding 16,000 horsepower.
  (a) Waukesha natural gas fired emergency generator identified as Emission Unit ID WEG-01. Rated at 1750 kilowatt output and operated during emergencies or periodic testing.

(10) One (1) Ethylene storage tank at 12,000 gallon storage capacity identified as Emission Unit ID Ethylene Storage Tank and subject to the New Source Performance Standard for Volatile Organic Compound Liquid Storage Vessels for which Construction, Reconstruction or Modification Commenced after July 23, 1984 (40 CFR Part 60.110b Subpart Kb). Installation date of 1990.

(11) One (1) pentane storage tank at 10,000 gallon storage capacity. One (1) butane storage tank at 3500 gallon storage capacity. One (1) propane storage tank at 3500 gallon storage capacity. One (1) odorant storage tank at 100 gallon storage capacity.

A.4 FESOP Applicability [326 IAC 2-8-2]

This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM) and the Indianapolis Environmental Resources Management Division (ERMD) for a Federally Enforceable State Operating Permit (FESOP).

A.5 Prior Permit Conditions

(a) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits.

(b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, including any term or condition from a previously issued construction or operation permit, IDEM, OAM, and ERMD shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued.

SECTION B GENERAL CONDITIONS

B.1 Permit No Defense [IC 13]

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a FESOP under 326 IAC 2-8.

B.2 Definitions [326 IAC 2-8-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2, and 326 IAC 2-7 shall prevail.

B.3 Permit Term [326 IAC 2-8-4(2)]

This permit is issued for a fixed term of five (5) years from the effective date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3.

B.4 Enforceability [326 IAC 2-8-6]

(a) All terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM and ERMD.

(b) Unless otherwise stated, terms and conditions of this permit, including any provisions to limit the source's potential to emit, are enforceable by the United States Environmental Protection Agency (U.S. EPA) and citizens under the Clean Air Act.

(c) All terms and conditions in this permit that are local requirements, including any provisions designed to limit the source's potential to emit, are enforceable by ERMD.

B.5 Termination of Right to Operate [326 IAC 2-8-9] [326 IAC 2-8-3(h)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-8-3(h) and 326 IAC 2-8-9.

B.6 Severability [326 IAC 2-8-4(4)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.7 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]

This permit does not convey any property rights of any sort, or any exclusive privilege.

B.8 Duty to Supplement and Provide Information [326 IAC 2-8-3(f)] [326 IAC 2-8-4(5)(E)]

(a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Environmental Resources Management Division
Air Quality Management Section, Permits
2700 South Belmont Avenue
Indianapolis, Indiana 46221

(b) The Permittee shall furnish to IDEM, OAM, and ERMD within a reasonable time, any information that IDEM, OAM, and ERMD may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit.

(c) Upon request, the Permittee shall also furnish to IDEM, OAM, and ERMD copies of records required to be kept by this permit. If the Permittee wishes to assert a claim of confidentiality over any of the furnished records, the Permittee must furnish such records to IDEM, OAM, and ERMD along with a claim of confidentiality under 326 IAC 17. If requested by IDEM, OAM, or the U.S. EPA, to furnish copies of requested records directly to U. S. EPA, and if the Permittee is making a claim of confidentiality regarding the furnished records, the Permittee must furnish such confidential records directly to the U.S. EPA along with a claim of confidentiality under 40 CFR 2, Subpart B.

B.9 Compliance Order Issuance [326 IAC 2-8-5(b)]

IDEM, OAM and ERMD may issue a compliance order to this Permittee upon discovery that this permit is in nonconformance with an applicable requirement. The order may require immediate compliance or contain a schedule for expeditious compliance with the applicable requirement.

B.10 Compliance with Permit Conditions [326 IAC 2-8-4(5)(A)] [326 IAC 2-8-4(5)(B)]

(a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit constitutes a violation of the Clean Air Act and is grounds for:

(1) Enforcement action;

(2) Permit termination, revocation and reissuance, or modification; and

(3) Denial of a permit renewal application.

(b) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

B.11 Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(I)] [326 IAC 2-8-5(1)]

(a) Where specifically designated by this Permit or required by an applicable requirement, any application form, report, or compliance certification submitted under this permit shall contain certification by an authorized individual of truth, accuracy, and completeness. This certification, and any other certification required under this permit, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) One (1) certification shall be included, on the attached Certification Form, with each submittal.

(c) An authorized individual is defined at 326 IAC 2-1.1-1(1).

B.12 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The certification shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than April 15 of each year to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Environmental Resources Management Division
Air Quality Management Section, Compliance Data
2700 South Belmont Avenue
Indianapolis, Indiana 46221

(b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, and ERMD on or before the date it is due.

(c) The annual compliance certification report shall include the following:

(1) The identification of each term or condition of this permit that is the basis of the certification;

(2) The compliance status;

(3) Whether compliance was based on continuous or intermittent data;

(4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-8-4(3); and

(5) Such other facts as specified in Sections D of this permit, IDEM, OAM, and ERMD may require to determine the compliance status of the source.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

B.13 Preventive Maintenance Plan [326 IAC 1-6-3][326 IAC 2-8-4(9)] [326 IAC 2-8-5(a)(1)]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) within ninety (90) days after issuance of this permit, including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond its control, the PMP cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

Environmental Resources Management Division
Air Quality Management Section, Compliance Data
2700 South Belmont Avenue
Indianapolis, Indiana 46221

(b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that lack of proper maintenance does not cause or contribute to a violation of any limitation on emissions or potential to emit.

(c) PMP's shall be submitted to IDEM, OAM, and ERMD upon request and shall be subject to review and approval by IDEM, OAM, and ERMD.

B.14 Emergency Provisions [326 IAC 2-8-12]

(a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-8-12.

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describes the following:

(1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;

(2) The permitted facility was at the time being properly operated;

(3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAM and ERMD, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

IDEM, OAM
Telephone No.: 1-800-451-6027 (ask for Office of Air Management, Compliance Section) or,
Telephone No.: 317-233-5674 (ask for Compliance Section)
Facsimile No.: 317-233-5967

ERMD
Telephone No.: 317-327-2234
Facsimile No.: 317-327-2274

Failure to notify IDEM, OAM and ERMD, by telephone or facsimile within four (4) daytime business hours after the beginning of the emergency, or after the emergency is discovered or reasonably should have been discovered, shall constitute a violation of 326 IAC 2-8 and any other applicable rules. [326 IAC 2-8-12(f)]

(5) For each emergency lasting one (1) hour or more, the Permittee submitted notice either in writing or facsimile, of the emergency to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Environmental Resources Management Division
Air Quality Management Section, Compliance Data
2700 South Belmont Avenue
Indianapolis, Indiana 46221

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-8-4(3)(C)(ii) and must contain the following:

(A) A description of the emergency;

(B) Any steps taken to mitigate the emissions; and

(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the “authorized individual” as defined by 326 IAC 2-1.1-1(1).

(6) The Permittee immediately took all reasonable steps to correct the emergency.

(c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

(d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions) for sources subject to this rule after the effective date of this rule. This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

(e) IDEM, OAM and ERMD, may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.

(f) Failure to notify IDEM, OAM and ERMD, by telephone or facsimile of an emergency lasting more than one (1) hour in compliance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.

(g) Operations may continue during an emergency only if the following conditions are met:

(1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

(2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:

(A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and

(B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

Any operations shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]

(a) Deviations from any permit requirements (for emergencies see Section B.14 - Emergency Provision), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Environmental Resources Management Division
Air Quality Management Section, Compliance Data
2700 South Belmont Avenue
Indianapolis, Indiana 46221

within ten (10) calendar days from the date of the discovery of the deviation.

(b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:

(1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or

(2) An emergency as defined in 326 IAC 2-7-1(12); or

(3) Failure to implement elements of the Preventive Maintenance Plan unless lack of maintenance has caused or contributed to a deviation.

(4) Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred is a deviation.

(c) Written notification shall be submitted on the attached Emergency/Deviation Occurrence Reporting Form or its substantial equivalent. The notification does not need to be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(d) Proper notice submittal under 326 IAC 2-7-16 satisfies the requirement of this subsection.

B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-8-4(5)(C)] [326 IAC 2-8-7(a)] [326 IAC 2-8-8]

(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a FESOP modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)]

(b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAM and ERMD determines any of the following:

(1) That this permit contains a material mistake.

(2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.

(3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]

(c) Proceedings by IDEM, OAM and ERMD, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-8-8(b)]

(d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAM and ERMD, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAM and ERMD, may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

B.17 Permit Renewal [326 IAC 2-8-3(h)]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAM and ERMD and shall include the information specified in 326 IAC 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, IN 46206-6015

and

Environmental Resources Management Division
Air Quality Management Section, Permits
2700 South Belmont Avenue
Indianapolis, Indiana 46221

(b) Timely Submittal of Permit Renewal [326 IAC 2-8-3]

(1) A timely renewal application is one that is:

(A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and

(B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, and ERMD on or before the date it is due.

(2) If IDEM, OAM and ERMD upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied.

(c) Right to Operate After Application for Renewal [326 IAC 2-8-9]
If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAM and ERMD takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAM and ERMD, any additional information identified as needed to process the application.

B.18 Permit Amendment or Modification [326 IAC 2-8-10] [326 IAC 2-8-11.1]

(a) The Permittee must comply with the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Environmental Resources Management Division
Air Quality Management Section, Permits
2700 South Belmont Avenue
Indianapolis, Indiana 46221

Any such application should be certified by the "authorized individual" as defined by 326 IAC 2-1.1(1) only if a certification is required by the terms of the applicable rule.

(c) The Permittee may implement the administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.19 Changes Under Section 502(b)(10) of the Clean Air Act [326 IAC 2-8-15(b)]

The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-8-15(a) and the following additional condition:

For each such change, the required written notification shall include a brief description of the change within the source, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change.

B.20 Operational Flexibility [326 IAC 2-8-15]

(a) The Permittee may make any change or changes at this source that are described in 326 IAC 2-8-15(b) through (d), without prior permit revision, if each of the following conditions is met:

(1) The changes are not modifications under any provision of Title I of the Clean Air Act;

(2) Any approval required by 326 IAC 2-1.1 has been obtained;

(3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

(4) The Permittee notifies the:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Environmental Resources Management Division
Air Quality Management Section, Permits
2700 South Belmont Avenue
Indianapolis, Indiana 46221

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

(5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-8-15(b) through (d) and makes such records available, upon reasonable request, to public review.

Such records shall consist of all information required to be submitted to IDEM, OAM and ERMD, in the notices specified in 326 IAC 2-8-15(b), (c)(1), and (d).

(b) For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

(1) A brief description of the change within the source;

(2) The date on which the change will occur;

(3) Any change in emissions; and

(4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted by the Permittee does not require the certification by the “authorized individual” as defined by 326 IAC 2-1.1-1(1).

(c) Emission Trades [326 IAC 2-8-15(c)]
The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(c).

(d) Alternative Operating Scenarios [326 IAC 2-8-15(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, OAM or U.S. EPA is required.

(e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

B.21 Construction Permit Requirement [326 IAC 2]

Except as allowed by Indiana P.L. 130-1996 Section 12, as amended by P.L. 244-1997, modification, construction, or reconstruction shall be approved as required by and in accordance with 326 IAC 2.

B.22 Inspection and Entry [326 IAC 2-8-5(a)(2)]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, the Permittee shall allow IDEM, OAM and ERMD, U.S. EPA, or an authorized representative to perform the following:

(a) Enter upon the Permittee's premises where a FESOP source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

(b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

(c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

(d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.
[326 IAC 2-8-5(a)(4)]

(1) The Permittee may assert a claim that, in the opinion of the Permittee, information removed or about to be removed from the source by IDEM, OAM, and ERMD or an authorized representative, contains information that is confidential under IC 5-14-3-4(a). The claim shall be made in writing before or at the time the information is removed from the source. In the event that a claim of confidentiality is so asserted, neither IDEM, OAM, and ERMD nor an authorized representative, may disclose the information unless and until IDEM, OAM, and ERMD makes a determination under 326 IAC 17-1-7 through 326 IAC 17-1-9 that the information is not entitled to confidential treatment and that determination becomes final. [IC 5-14-3-4; IC 13-14-11-3; 326 IAC 17-1-7 through 326 IAC 17-1-9]

(2) The Permittee, and IDEM, OAM, and ERMD acknowledge that the federal law applies to claims of confidentiality made by the Permittee with regard to information removed or about to be removed from the source by U.S. EPA. [40 CFR Part 2, Subpart B]

B.23 Transfer of Ownership or Operational Control [326 IAC 2-8-10]

(a) The Permittee must comply with the requirements of 326 IAC 2-8-10 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.

(b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Environmental Resources Management Division
Air Quality Management Section, Permits
2700 South Belmont Avenue
Indianapolis, Indiana 46221

The application which shall be submitted by the Permittee does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-11(b)(3)]

B.24 Annual Fee Payment [326 IAC 2-8-4(6)] [326 IAC 2-8-16]

(a) The Permittee shall pay annual fees to IDEM, OAM, and ERMD, within thirty (30) calendar days of receipt of a billing. If the Permittee does not receive a bill from IDEM, OAM the applicable fee is due April 1 of each year.

(b) Failure to pay may result in administrative enforcement action, or revocation of this permit.

(c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAM, Technical Support and Modeling Section), to determine the appropriate permit fee.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

Emissions Limitations and Standards [326 IAC 2-8-4(1)]

C.1 Overall Source Limit [326 IAC 2-8]

The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.

(a) Pursuant to 326 IAC 2-8:

(1) The potential to emit any regulated pollutant from the entire source shall be limited to less than one-hundred (100) tons per twelve (12) consecutive month period. This limitation shall also make the requirements of 326 IAC 2-3 (Emission Offset) not applicable;

(2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and

(3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.

(b) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided that the source's potential to emit does not exceed the above specified limits.

(c) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

C.2 Particulate Matter Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [326 IAC 6-3-2(c)]

Pursuant to 326 IAC 6-3-2(c), the allowable particulate matter emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.

C.3 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined by 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9) in a six (6) hour period.

C.4 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable.

C.5 Incineration [326 IAC 4-2] [326 IAC 9-1-2(3)]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and in 326 IAC 9-1-2.

C.6 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.7 Operation of Equipment [326 IAC 2-8-5(a)(4)]

All air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission unit(s) vented to the control equipment is (are) in operation.

C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61.140]

(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

(1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or

(2) If there is a change in the following:

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

(c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).

(d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Environmental Resources Management Division
Air Quality Management Section, Asbestos
2700 South Belmont Avenue
Indianapolis, Indiana 46221

The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(e) Procedures for Asbestos Emission Control
The Permittee shall comply with the emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4 emission control requirements are mandatory for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

(f) Indiana Accredited Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement that the inspector be accredited is federally enforceable.

Testing Requirements [326 IAC 2-8-4(3)]

C.9 Performance Testing [326 IAC 3-6]

(a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing methods approved by the IDEM,OAM.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Environmental Resources Management Division
Air Quality Management Section, Compliance Data
2700 South Belmont Avenue
Indianapolis, Indiana 46221

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

(b) All test reports must be received by IDEM, OAM and ERMD within forty-five (45) days after the completion of the testing. An extension may be granted by the Commissioner, if the source submits to IDEM, OAM and ERMD, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

C.10 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment no more than ninety (90) days after receipt of this permit. If due to circumstances beyond its control, this schedule cannot be met, the Permittee may extend the compliance schedule an additional ninety (90) days provided the Permittee notify:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Environmental Resources Management Division
Air Quality Management Section, Compliance Data
2700 South Belmont Avenue
Indianapolis, Indiana 46221

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the “authorized individual” as defined by 326 IAC 2-1.1-1(1).

C.11 Monitoring Methods [326 IAC 3]

Any monitoring or testing performed to meet the applicable requirements of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

Corrective Actions and Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

C.12 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present at a source in more than a threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall:

(a) Submit:

(1) A compliance schedule for meeting the requirements of 40 CFR 68 by the date provided in 40 CFR 68.10(a); or

(2) As a part of the compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP); and

(3) A verification to IDEM, OAM, and ERMD that a RMP or a revised plan was prepared and submitted as required by 40 CFR 68.

(b) Provide annual certification to IDEM, OAM, and ERMD that the Risk Management Plan is being properly implemented.

All documents submitted pursuant to this condition shall include the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

C.13 Compliance Monitoring Plan - Failure to Response Steps [326 IAC 2-8-4][326 IAC 2-8-5][326 IAC 1-6] [326 IAC 2-8-4(3)]

(a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:

(1) This condition;

(2) The Compliance Determination Requirements in Section D of this permit;

(3) The Compliance Monitoring Requirements in Section D of this permit;

(4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and

(5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAM and ERMD upon request and shall be subject to review and approval by IDEM, OAM, and ERMD. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of :

(A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and

(B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.

(b) For each compliance monitoring condition of this permit, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the permit unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.

(c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:

(1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.

(2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied or;

(3) An automatic measurement was taken when the process was not operating; or

(4) The process has already returned to operating within “normal” parameters and no response steps are required.

(d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

C.14 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4][326 IAC 2-8-5]

(a) When the results of a stack test performed in conformance with Section C.9 - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAM, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected facility while the corrective actions are being implemented. IDEM, OAM shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAM within thirty (30) days of receipt of the notice of deficiency. IDEM, OAM reserves the authority to use enforcement activities to resolve noncompliant stack tests.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAM that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAM may extend the retesting deadline.

Failure of the second test to demonstrate compliance with the appropriate permit conditions may be grounds for immediate revocation of the permit to operate the affected facility.

The documents submitted pursuant to this condition do not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

C.15 Emission Statement [326 IAC 2-6] [326 IAC 2-8-4(3)]

(a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6. This annual statement must be received by April 15 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8) (Emission Statement Operating Year). The annual statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Environmental Resources Management Division
Air Quality Management Section, Compliance Data
2700 South Belmont Avenue
Indianapolis, Indiana 46221

(b) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, and ERMD on or before the date it is due.

C.16 Monitoring Data Availability

(a) With the exception of performance tests conducted in accordance with Section C.9-Performance Testing all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.

(b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.

(c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.

(d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.

(e) At its discretion, IDEM and ERMD may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.

(f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements in (a) above.

C.17 General Record Keeping Requirements [326 IAC 2-8-4(3)][326 IAC 2-8-5]

(a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAM and ERMD representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner or ERMD makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner or ERMD within a reasonable time.

(b) Records of required monitoring information shall include, where applicable:

(1) The date, place, and time of sampling or measurements;

(2) The dates analyzes were performed;

(3) The company or entity performing the analyzes;

(4) The analytic techniques or methods used;

(5) The results of such analyzes; and

(6) The operating conditions existing at the time of sampling or measurement.

(c) Support information shall include, where applicable:

(1) Copies of all reports required by this permit;

(2) All original strip chart recordings for continuous monitoring instrumentation;

(3) All calibration and maintenance records;

(4) Records of preventive maintenance shall be sufficient to demonstrate that improper maintenance did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C.13 - Compliance Monitoring Plan - Failure to take Response Steps, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.

(d) All record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.18 General Reporting Requirements [326 IAC 2-8-4(3)(C)]

(a) To affirm that the source has met all the compliance monitoring requirements stated in this permit the source shall submit a Semi - Annual Compliance Monitoring Report. Any deviation from the requirements and the date(s) of each deviation must be reported. The Compliance Monitoring Report shall include the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

Environmental Resources Management Division
Air Quality Management Section, Compliance Data
2700 South Belmont Avenue
Indianapolis, Indiana 46221

(c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, and ERMD on or before the date it is due.

(d) Unless otherwise specified in this permit, any semi - annual report shall be submitted within thirty (30) days of the end of the reporting period. The report(s) do not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(e) All instances of deviations as described in Section B.15- Deviations from Permit Requirements Conditions must be clearly identified in such reports. The Emergency/Deviation Occurrence Report does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.

(g) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

Stratospheric Ozone Protection

C.19 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

(a) Persons opening appliances for maintenance, service, repair or disposal must comply with the required practices pursuant to 40 CFR 82.156

(b) Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

(c) Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1 FACILITY OPERATION CONDITIONS

Emission Unit ID 01 Allison Gas Turbine	Facility Description [326 IAC 2-8-4(10)] One (1) Allison simple cycle Gas Turbine for refrigerant compressor identified as Emission Unit ID 01 and exhausting at Stack Vent ID 01. Natural gas fired at 38.0 million Btu per hour maximum heat input. Model number 501-KC5. Installation date of 1990. Includes non HAP fugitive VOC emissions from the gas liquefaction compressor/heat exchange system.

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.1.1 General Provisions Relating to NSPS [326 IAC 12-1][40 CFR Part 60, Subpart A]

The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, apply to the facility described in this Section except when otherwise specified in 40 CFR Part 60, Subpart GG (Standards of Performance for Stationary Gas Turbines).

D.1.2 Emission Offset Minor Limit [326 IAC 2-3][326 IAC 2-8-4]

Pursuant to Installation Permit number 900141-01, issued on November 6, 1990, Emission Unit ID 01 shall be limited to 32.1 pounds of NO_x emissions per hour and 83.6 tons of NO_x per year. Pursuant to 326 IAC 2-8-4 (FESOP; Permit Content), Emission Unit ID 01 is limited to 197.6 million cubic feet of natural gas consumption per rolling twelve (12) consecutive month period and is limited to a nitrogen content for gas turbine fuel of 23.2 percent by weight. The natural gas consumption limitation and nitrogen content limitation of the fuel is required to limit the potential to emit NO_x to less than 83.6 tons per rolling twelve (12) consecutive month period. Compliance with this limit makes 326 IAC 2-3 (Emission Offset) and 326 IAC 2-7 (Part 70 Permit Program) not applicable.

D.1.3 New Source Performance Standards (NSPS) [326 IAC 12][40 CFR 60.330 Subpart GG]

Pursuant to 326 IAC 12 (New Source Performance Standards) and 40 CFR 60.330 Subpart GG (Standards of Performance for Stationary Gas Turbines):

(1) Sulfur dioxide (SO_2) emissions from Emission Unit ID 01 shall not exceed 0.015 percent by volume at 15 percent oxygen and on a dry basis. Or;

No owner or operator subject to the provisions of 40 CFR 60.330 Subpart GG shall burn in any stationary gas turbine any fuel which contains sulfur in excess of 0.8 percent by weight.

(2) Nitrogen oxides (NO_x) emissions from Emission Unit ID 01 shall not exceed the following standard:

$$STD = 0.015 \; x \; (14.4/Y) + F$$

Where: STD = Allowable NO_x emissions in percent by volume at fifteen (15) percent oxygen and on a dry basis (ppm = percent by volume x 10^4).

Y = Manufacturer's rated heat rate at manufacturer's rated load or, actual measured heat rate based on the lower heating value of fuel as measured at peak load in kilojoules per watt hour. Y shall not exceed 14.4 kilojoules per watt hour.

F = The fuel bound nitrogen allowance as defined in 40 CFR 60.332(a)(3) and listed below:

Fuel-bound nitrogen (N) (percent by weight)	F (NO_x percent by volume)
N less than or equal to 0.015	0.0
N greater than 0.015 but less than or equal to 0.1	0.04(N)
N greater than 0.1 but less than or equal to 0.25	0.004 + 0.0067(N - 0.1)
N greater than 0.25	0.005

D.1.4 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

Fugitive volatile organic compound (VOC) emissions from Emission Unit ID 01, which includes the gas liquefaction compressor/heat exchange system, are limited to 24.0 tons per rolling twelve (12) consecutive month period such that 326 IAC 8-1-6 (Volatile Organic Compound Rules: New Facilities; General Reduction Requirements) does not apply.

D.1.5 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B.13 - Preventive Maintenance Plan, of this permit, is required for this facility.

Compliance Determination Requirements

D.1.6 Testing Requirements [326 IAC 2-8-5(a)(1),(4)]

During the period between 36 and 48 months after issuance of this permit, the Permittee shall perform NO_x emissions testing utilizing 40 CFR Part 60, Appendix A and 40 CFR Part 60.335 or other methods as approved by the Commissioner. In addition to these requirements, IDEM and/or ERMD may require compliance testing when necessary to determine if Emission Unit ID 01 is in compliance.

D.1.7 New Source Performance Standards (NSPS) [326 IAC 12][40 CFR 60.330 Subpart GG]

Pursuant to 326 IAC 12 (New Source Performance Standards) and 40 CFR 60.334(c) Subpart GG (Standards of Performance for Stationary Gas Turbines), compliance with the SO_2 and NO_x emission limitations of Section D.1.3 of this Permit shall be determined based on the fuel sulfur and fuel nitrogen content of the fuel being fired in Emission Unit ID 01. Excess emissions shall be determined as:

(1) Any period during which the fuel-bound nitrogen content of gas turbine fuel is greater than 23.2 percent by weight.

(2) Any period during which the sulfur content of the fuel being fired in the gas turbine exceeds 0.8 percent by weight.

Owners, operators or fuel vendors may develop custom schedules for determination of sulfur and nitrogen content values based on the design and operation of Emission Unit ID 01 and the characteristics of the fuel supply. These custom schedules shall be substantiated with data and must be approved by IDEM and ERMD before they can be used to comply with the daily content monitoring requirement of 326 IAC 12 (NSPS) and 40 CFR 60.334(b) Subpart GG.

D.1.8 VOC Emissions

Compliance with Condition D.1.4 shall be demonstrated at the end of each month based on the total fugitive volatile organic compound material balance loss from refrigerant used in the gas liquefaction compressor/heat exchange system for the most recent twelve (12) month period.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

D.1.9 Monitoring [326 IAC 12][40 CFR 60.334(b)]

(a) The Permittee shall monitor, on a daily basis, the nitrogen content of the natural gas being fired in Emission Unit ID 01. The Permittee shall monitor, at least one (1) time per semi-annual calendar period, the sulfur content of the natural gas being fired in Emission Unit ID 01. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C.13 - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

(b) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.1.10 Record Keeping Requirements

(a) To document compliance with Conditions D.1.2, D.1.3 and D.1.4, the Permittee shall maintain records in accordance with (1) through (3) below. Records maintained shall be complete and sufficient to establish compliance with the NO_x, SO_2 and VOC emission limits established in Condition D.1.2, D.1.3 and D.1.4.

(1) Monthly records of daily natural gas fuel consumption in Emission Unit ID 01.

(2) Daily records of nitrogen content of natural gas fired in Emission Unit ID 01 and records of semi - annual sulfur content of natural gas fired in Emission Unit ID 01.

(3) Monthly material balance loss of volatile organic compounds in the refrigerant compressor system of Emission Unit ID 01.

(b) All records shall be maintained in accordance with Section C.17 - General Record Keeping Requirements, of this permit.

D.1.11 Reporting Requirements

(a) A semi - annual summary of the information listed below to document compliance with Condition D.1.2 and D.1.4 shall be submitted to the address(es) listed in Section C.18 - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the semi - annual calendar period being reported.

(1) Rolling twelve (12) consecutive month period natural gas consumption in Emission Unit ID 01.

(2) Fugitive VOC material balance loss from refrigerant used in the gas liquefaction/heat exchange system per rolling twelve (12) consecutive month period.

(b) Pursuant to 326 IAC 12 (NSPS) and 40 CFR 60.334(c)(1) Subpart GG, any period during which the fuel-bound nitrogen content of gas turbine fuel consumed in Emission Unit ID 01 exceeds the maximum fuel-bound nitrogen content allowed by 40 CFR 60.332(a)(3) which has been determined to be 23.2 percent by weight.

(c) Pursuant to 326 IAC 12 (NSPS) and 40 CFR 60.334(c)(2) Subpart GG, any period during which the sulfur content of the natural gas consumed in Emission Unit ID 01 exceeds 0.8 percent by weight.

SECTION D.2 FACILITY OPERATION CONDITIONS

Emission Unit ID 02 T-Thermal Vaporizer	Facility Description [326 IAC 2-8-4(10)] One (1) T-Thermal water submerged Vaporizer for the vaporization of liquefied natural gas identified as Emission Unit ID 02 and exhausting at Stack/Vent ID 02-A1 and 02-A2. Includes six (6) natural gas fired burners with a combined total heat input capacity of 72.0 million Btu per hour. Installation date of 1990.
Emission Unit ID 03 T-Thermal Vaporizer	Facility Description [326 IAC 2-8-4(10)] One (1) T-Thermal water submerged Vaporizer for the vaporization of liquefied natural gas identified as Emission Unit ID 03 and exhausting at Stack/Vent ID 03-B1 and 03-B2. Includes six (6) natural gas fired burners with a combined total heat input capacity of 72.0 million Btu per hour. Installation date of 1990.
Emission Unit ID 04 T-Thermal Vaporizer	Facility Description [326 IAC 2-8-4(10)] One (1) T-Thermal water submerged Vaporizer for the vaporization of liquefied natural gas identified as Emission Unit ID 04 and exhausting at Stack/Vent ID 04-C1 and 04-C2. Includes six (6) natural gas fired burners with a combined total heat input capacity of 72.0 million Btu per hour. Installation date of 1990.

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.2.1 General Provisions Relating to NSPS [326 IAC 12-1][40 CFR Part 60, Subpart A]

The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, apply to the Emission Unit(s) described in this Section except when otherwise specified in 40 CFR Part 60, Subpart Dc (New Source Performance Standards - Standards of Performance for Small Industrial - Commercial - Institutional Steam Generating Units).

D.2.2 Particulate Matter (PM) [326 IAC 6-2-1][326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-1 (Particulate Emission Limitations for Sources of Indirect Heating), the allowable PM emission rate from Emission Unit ID 02, 03 and 04 each shall not exceed the allowable PM emission rate as specified pursuant to 326 IAC 6-2-4 (Particulate Emissions for Facilities Specified in 326 IAC 6-2-1(c) and stated below.

$$Pt = 1.09/Q^{0.26}$$

Where: Pt = pounds of particulate matter emitted per million Btu (lb/MMBtu) heat input

Q = total source maximum operating capacity rating in million Btu per hour

For Q = 216 million Btu per hour (72.0 million Btu per hour for each of 3 Emission Unit ID's), Pt shall not exceed 0.3 pounds per million Btu.

D.2.3 Emission Offset Minor Limit [326 IAC 2-3][326 IAC 2-8-4]

Pursuant to Installation Permit number 900141-01, issued on November 6, 1990, each Emission Unit ID 02, 03 and 04 shall be limited to 11.1 pounds of NO_x per hour and shall be limited to a combined total 3.3 tons NO_x emissions per rolling twelve (12) consecutive month period. Pursuant to 326 IAC 2-8-4 (FESOP; Permit Content), Emission Unit ID 02, 03 and 04 are limited to a combined total of 43.2 million cubic feet of natural gas consumption per rolling twelve (12) consecutive month period. The natural gas consumption limitation is required to limit the potential to emit NO_x to less than 3.3 tons per rolling twelve (12) consecutive month period. Compliance with this limit makes 326 IAC 2-3 (Emission Offset) and 326 IAC 2-7 (Part 70 Permit Program) not applicable.

D.2.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B.13 - Preventive Maintenance Plan, of this permit, is required for Emission Unit ID 02, 03 and 04.

Compliance Determination Requirements

D.2.5 Testing Requirements [326 IAC 2-8-5(1)]

The Permittee is not required to test this Emission Unit ID 02, 03 and/or 04 by this permit. However, IDEM and/or ERMD may require compliance testing when necessary to determine if the facility is in compliance. If testing is required by IDEM and/or ERMD, compliance with the PM and/or NO_x limit(s) specified in Condition D.2.2 and D.2.3 shall be determined by a performance test conducted in accordance with Section C.9 - Performance Testing.

Record Keeping and Reporting Requirement [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.2.6 Record Keeping Requirements

(a) Pursuant to 40 CFR 60.48c(g) Subpart Dc (New Source Performance Standards - Standards of Performance for Small Industrial - Commercial - Institutional Steam Generating Units), the Permittee shall record and maintain records of the amount(s) of fuel combusted during each day.

(b) Monthly natural gas consumption for Emission Unit ID 02, 03 and 04 per rolling twelve (12) consecutive month period.

(c) All records shall be maintained in accordance with Section C.17 - General Record Keeping Requirements, of this permit.

D.2.7 Reporting Requirements

A semi - annual calendar period summary of combined natural gas consumption in Emission Unit ID 02, 03 and 04 shall be submitted to the address(es) listed in Section C.18 - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the semi - annual calendar period being reported.

D.3 FACILITY OPERATION CONDITIONS

	Insignificant Activities
Emission Unit ID Ethylene Storage Tank Ethylene Storage Tank	Facility Description [326 IAC 2-8-4(10)] One (1) Ethylene storage tank at 12,000 gallon storage capacity identified as Emission Unit ID Ethylene Storage Tank and subject to the New Source Performance Standard for Volatile Organic Compound Liquid Storage Vessels for which Construction, Reconstruction or Modification Commenced after July 23, 1984 (40 CFR Part 60.110b Subpart Kb). Installation date of 1990.
Emission Unit ID WEG-01 Waukesha Emergency Generator	Facility Description [326 IAC 2-8-4(10)] One (1) Waukesha natural gas fired emergency generator identified as Emission Unit ID WEG-01. Rated at 1750 kilowatt output and operated during emergencies or periodic testing.
Emission Unit ID EFP-01 Caterpillar Emergency Fire Pump	Facility Description [326 IAC 2-8-4(10)] One (1) Caterpillar diesel fuel fired emergency fire pump identified as Emission Unit ID EFP-01. Rated at 460 horsepower and operated during emergencies, fire training and periodic testing.

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.3.1 General Provisions Relating to NSPS [326 IAC 12-1][40 CFR Part 60, Subpart A]

The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, apply to Emission Unit ID Ethylene Storage Tank as described in this Section except when otherwise specified in 40 CFR Part 60, Subpart Kb (New Source Performance Standards - Standards of Performance for Volatile Organic Liquid Storage Vessels for Which Construction, Reconstruction or Modification Commenced after July 23, 1984).

D.3.2 Nitrogen Oxides (NO_x) [326 IAC 2-8-4]

Pursuant to 326 IAC 2-8-4 (FESOP; Permit Content):

(a) Emission Unit ID WEG-01 is limited to 3.0 million cubic feet of natural gas consumption per rolling twelve (12) consecutive month period. This limitation is equivalent to 500 annual operating hours at maximum capacity.

(b) Emission Unit ID EFP-01 is limited to 4379 gallons per year of diesel fuel consumption per rolling twelve (12) consecutive month period. This limitation is equivalent to 500 annual operating hours at maximum capacity.

Compliance with this limit makes 326 IAC 2-3 (Emission Offset) and 326 IAC 2-7 (Part 70 Permit Program) not applicable

Compliance Determination Requirement

D.3.3 Testing Requirements [326 IAC 2-8-5(a)(1), (4)][326 IAC 2-1.1-1]

The Permittee is not required to test this facility by this Permit. However, IDEM and/or ERMD may require compliance testing when necessary to determine if the facility is in compliance. If testing is required by IDEM and/or ERMD, compliance with the NO_x limit specified in Condition D.3.2 shall be determined by a performance test conducted in accordance with Section C.9 - Performance Testing.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.3.4 Record Keeping Requirements

(a) Pursuant to the New Source Performance Standard 40 CFR Part 60.116b Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels for Which Construction, Reconstruction or Modification Commenced after July 23, 1984, the Permittee shall keep readily accessible records showing the dimension or tank capacity of Emission Unit ID Ethylene Storage Tank. This record shall be kept for the life of the source.

(b) Monthly natural gas consumption and diesel fuel consumption in Emission Unit ID WEG-01 and EFP-01 per rolling twelve (12) consecutive month period.

(c) All records shall be maintained in accordance with Section C.17 - General Record Keeping Requirements, of this Permit.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION
and
INDIANAPOLIS ENVIRONMENTAL RESOURCES MANAGEMENT DIVISION
AIR QUALITY MANAGEMENT SECTION, COMPLIANCE DATA

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) CERTIFICATION

Source Name: Citizens Gas & Coke Utility (LNG North)
Source Address: 4536 West 86th Street, Indianapolis, Indiana 46268
Mailing Address: 2020 North Meridian Street, Indianapolis, Indiana 46204
FESOP No.: F097-10018-00141

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.

Please check what document is being certified:

9 Annual Compliance Certification Letter

9 Test Result (specify) _____

9 Report (specify) _____

9 Notification (specify) _____

9 Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION

P.O. Box 6015
100 North Senate Avenue
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967

and
INDIANAPOLIS ENVIRONMENTAL RESOURCES MANAGEMENT DIVISION
AIR QUALITY MANAGEMENT SECTION, COMPLIANCE DATA

2700 S. Belmont Ave.
Indianapolis Indiana 46221
Phone: 317-327-2234
Fax: 317-327-2274

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
EMERGENCY/DEVIATION OCCURRENCE REPORT

Source Name: Citizens Gas & Coke Utility (LNG North)
Source Address: 4536 West 86th Street, Indianapolis, Indiana 46268
Mailing Address: 2020 North Meridian Street, Indianapolis, Indiana 46204
Part 70 Permit No.: F097-10018-00141

This form consists of 2 pages **Page 1 of 2**

Check either No. 1 or No.2
9 1. This is an emergency as defined in 326 IAC 2-7-1(12) ĆThe Permittee must notify the ERMD and OAM, within four (**4**) business hours; and ĆThe Permittee must submit notice in writing or by facsimile to ERMD and OAM within two (**2**) days, and follow the other requirements of 326 IAC 2-8-12
9 2. This is a deviation, reportable per 326 IAC 2-8-4(3)(C) ĆThe Permittee must submit notice in writing within ten (**10**) calendar days

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency/Deviation:
Describe the cause of the Emergency/Deviation:

If any of the following are not applicable, mark N/A **Page 2 of 2**

Date/Time Emergency/Deviation started:
Date/Time Emergency/Deviation was corrected:
Was the facility being properly operated at the time of the emergency/deviation? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO_2, VOC, NO_X, CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency/deviation:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____
Title / Position: _____
Date: _____
Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION
and
INDIANAPOLIS ENVIRONMENTAL RESOURCES MANAGEMENT DIVISION
AIR QUALITY MANAGEMENT SECTION, COMPLIANCE DATA

FESOP Semi - Annual Report

Source Name: Citizens Gas & Coke Utility (LNG North)
Source Address: 4536 West 86th Street, Indianapolis, Indiana 46268
Mailing Address: 2020 North Meridian Street, Indianapolis, Indiana 46204
FESOP No.: F097-10018-00141
Facility: Emission Unit ID 01 Allison Gas Turbine
Parameter: Rolling twelve (12) consecutive month period natural gas consumption
Limit: 197.6 MMCF per rolling twelve (12) consecutive month period

SEMI - ANNUAL PERIOD: _____ YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			
Month 4			
Month 5			
Month 6			

9 No deviation occurred in this semi - annual period.

9 Deviation/s occurred in this semi - annual period.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION
and
INDIANAPOLIS ENVIRONMENTAL RESOURCES MANAGEMENT DIVISION
AIR QUALITY MANAGEMENT SECTION, COMPLIANCE DATA

FESOP Semi - Annual Report

Source Name: Citizens Gas & Coke Utility (LNG North)
Source Address: 4536 West 86th Street, Indianapolis, Indiana 46268
Mailing Address: 2020 North Meridian Street, Indianapolis, Indiana 46204
FESOP No.: F097-10018-00141
Facility: Emission Unit ID 01 Allison Gas Turbine Refrigerant Compressor System
Parameter: Rolling twelve (12) consecutive month VOC loss
Limit: Limited to 24.0 tons per rolling twelve (12) consecutive month period

SEMI - ANNUAL PERIOD: _____ YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			
Month 4			
Month 5			
Month 6			

9 No deviation occurred in this semi - annual period.

9 Deviation/s occurred in this semi - annual period.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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COMPLIANCE DATA SECTION
and
INDIANAPOLIS ENVIRONMENTAL RESOURCES MANAGEMENT DIVISION
AIR QUALITY MANAGEMENT SECTION, COMPLIANCE DATA

FESOP Semi - Annual Report

Source Name: Citizens Gas & Coke Utility (LNG North)
Source Address: 4536 West 86th Street, Indianapolis, Indiana 46268
Mailing Address: 2020 North Meridian Street, Indianapolis, Indiana 46204
FESOP No.: F097-10018-00141
Facility: Emission Unit ID 02, 03 and 04 T-Thermal Vaporizers
Parameter: Rolling twelve (12) consecutive month natural gas consumption
Limit: Combined consumption of less than 43.2 MMCF per rolling twelve (12) consecutive month period

SEMI - ANNUAL PERIOD: _____ YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			
Month 4			
Month 5			
Month 6			

9 No deviation occurred in this semi - annual period.

9 Deviation/s occurred in this semi - annual.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION
and
INDIANAPOLIS ENVIRONMENTAL RESOURCES MANAGEMENT DIVISION
AIR QUALITY MANAGEMENT SECTION, COMPLIANCE DATA

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
SEMI - ANNUAL COMPLIANCE MONITORING REPORT

Source Name: Citizens Gas & Coke Utility (LNG North)
Source Address: 4536 West 86th Street, Indianapolis, Indiana 46268
Mailing Address: 2020 North Meridian Street, Indianapolis, Indiana 46204
FESOP No.: F097-10018-00141

Months: _____ to _____ Year: _____

This report is an affirmation that the source has met all the requirements compliance monitoring stated in this permit. This report shall be submitted semi - annually. Any deviation from the compliance monitoring requirements and the date(s) of each deviation must be reported. Additional pages may be attached if necessary. This form can be supplemented by attaching the Emergency/Deviation Occurrence Report. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD

9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD.

Compliance Monitoring Requirement (eg. Permit Condition D.1.3)	**Number of Deviations**	**Date of each Deviations**

Form Completed By: _____
Title/Position: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

Environmental Resources Management Division
Air Quality Management Section

Technical Support Document (TSD) for a Federally Enforceable State Operating Permit (FESOP)

Source Background And Description

Source Name:	**Citizen's Gas and Coke Utility - LNG North**
Source Location:	**4536 West 86th Street, Indianapolis, Indiana 46268**
County:	**Marion**
SIC Code:	**4924**
Operation Permit No.:	**F097-10018-00141**
Permit Reviewer:	**M. Caraher**

The Environmental Resources Management Division (ERMD), Air Quality Management Section has reviewed a Federally Enforceable State Operating Permit (FESOP) application received from Citizen's Gas and Coke Utility on August 5, 1998 relating to the operation of a liquefied natural gas storage facility under a Standard Industrial Classification Code (SIC) number of 4924 (Establishments engaged in the transmission and/or storage of natural gas for sale).

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

(1) Facility Description [326 IAC 2-8-4(10)] One (1) Allison simple cycle Gas Turbine for refrigerant compressor identified as Emission Unit ID 01 and exhausting at Stack Vent ID 01. Natural gas fired at 38.0 million Btu per hour maximum heat input. Model number 501-KC5. Installation date of 1990. Includes non HAP fugitive VOC emissions from the gas liquefaction compressor/heat exchange system.

(2) Facility Description [326 IAC 2-8-4(10)] One (1) T-Thermal water submerged Vaporizer for the vaporization of liquefied natural gas identified as Emission Unit ID 02 and exhausting at Stack/Vent ID 02-A1 and 02-A2. Includes six (6) natural gas fired burners with a combined total heat input capacity of 72.0 million Btu per hour. Installation date of 1990.

(3) Facility Description [326 IAC 2-8-4(10)] One (1) T-Thermal water submerged Vaporizer for the vaporization of liquefied natural gas identified as Emission Unit ID 03 and exhausting at Stack/Vent ID 03-B1 and 03-B2. Includes six (6) natural gas fired burners with a combined total heat input capacity of 72.0 million Btu per hour. Installation date of 1990.

(4) Facility Description [326 IAC 2-8-4(10)] One (1) T-Thermal water submerged Vaporizer for the vaporization of liquefied natural gas identified as Emission Unit ID 04 and exhausting at Stack/Vent ID 04-C1 and 04-C2. Includes six (6) natural gas fired burners with a combined total heat input capacity of 72.0 million Btu per hour. Installation date of 1990.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities operating at this source during this review process.

Emission Units and Pollution Control Equipment Under Enhanced New Source Review (ENSR)

There are no new facilities to be reviewed under the ENSR process.

Insignificant Activities

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(20):

(1) Natural gas fired combustion sources with heat input equal to or less than ten million Btu per hour.
  (a) Salt bath heater for mole sieve regeneration, operated while natural gas is being liquefied. Identified as Emission Unit ID SBH-01 and natural gas fired at maximum heat input of 6.5 million Btu per hour.

(2) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to 1 % by volume.

(3) Process vessel degassing and cleaning to prepare for internal repairs.

(4) Purging of gas lines and vessels that is related to routine maintenance and repair of buildings, structures, or vehicles at the source where air emissions from those activities would not be associated with any production process.

(5) Equipment used to collect any material that might be released during a malfunction, process upset or spill cleanup including catch tanks, temporary liquid separators, tanks and fluid handling equipment.

(6) On site fire and emergency response training approved by the department.

(7) Purge double block and bleed valves.

(8) Stationary fire pumps.
  (a) Caterpillar diesel fuel fired emergency fire pump identified as Emission Unit ID EFP-01. Rated at 460 horsepower and operated during emergencies, fire training and periodic testing.

(9) Natural gas turbines or reciprocating engines not exceeding 16,000 horsepower.
  (a) Waukesha natural gas fired emergency generator identified as Emission Unit ID WEG-01. Rated at 1750 kilowatt output and operated during emergencies or periodic testing.

(10) One (1) Ethylene storage tank at 12,000 gallon storage capacity identified as Emission Unit ID Ethylene Storage Tank and subject to the New Source Performance Standard for Volatile Organic Compound Liquid Storage Vessels for which Construction, Reconstruction or Modification Commenced after July 23, 1984 (40 CFR Part 60.110b Subpart Kb). Installation date of 1990.

(11) One (1) pentane storage tank at 10,000 gallon storage capacity. One (1) butane storage tank at 3500 gallon storage capacity. One (1) propane storage tank at 3500 gallon storage capacity. One (1) odorant storage tank at 100 gallon storage capacity.

Existing Approvals

(1) This source has been operating under the following approvals:

  (a) Installation Permit number 900141-01 through 900141-04, issued on November 6, 1990 for Emission Unit ID's 01, 02, 03 and 04.
  (b) Certificate of Operation 141-01 through 141-01, issued on March 24, 1992 for Emission Unit ID's 01, 02, 03 and 04.

(2) This source, operating under the previous approvals, has the following existing conditions incorporated into this initial FESOP:

(a) Pursuant to 326 IAC 2-1 (Permit Review Rules) and 326 IAC 2-3 (Emission Offset), Emission Unit ID 01, the Allison Gas Turbine, has retained the NO_x pound per hour and ton per year limitations of 32.1 pounds per hour and 83.6 tons per year. In the existing approvals, operation of Emission Unit ID was limited to 5200 annual operating hours. Compliance was to be demonstrated, prior to a stack test, by limiting the fuel-bound nitrogen content to a maximum of 23.2 percent by weight. Pursuant to the equation of 40 CFR 60.332(a)(2) Subpart GG (Standards of Performance for Stationary Gas Turbines), a maximum 23.2 percent nitrogen by weight equates to 211 ppm. At maximum fuel input to Emission Unit ID 01 and pursuant to Installation Permit 900141-01, 211 ppm equates to 32.1 pounds of NOx per hour. At 5200 annual operating hours, 32.1 pounds per hour is equivalent to 83.6 tons per year. In order to make such an hourly limitation practically enforceable, an annual fuel throughput restriction, per rolling twelve (12) consecutive month period, is imposed in this proposed FESOP, pursuant to 326 IAC 2-8-4, such that 326 IAC 2-3 does not apply (see fuel use calculation in TSD Appendix A page 1 of 8). In addition, the determination of the fuel-bound nitrogen content of the gas turbine fuel on a daily basis as well as daily fuel consumption for Emission Unit ID 01 has been retained to satisfy 326 IAC 12 (NSPS) and 40 CFR 60.334(b) Subpart GG.

Pursuant to Installation Permit 900141-01, Emission Unit ID 01 was not required to determine the daily sulfur content of the fuel because a local regulation (Regulation IV-4 Sulfur Dioxide Emissions), only, was imposed which limited SO_2 emissions to 0.01 pounds per million Btu of heat input. The source is not major for SO_2. At the time of Installation Permit issuance, the short term pound per million Btu limit was more restrictive than the requirements of the applicable New Source Performance Standard provisions of 40 CFR 60.333(a) or (b). The proposed FESOP incorporates Federal and State requirements only. As a result, the short term SO2 emission limit of 0.01 pounds per million Btu is not retained for the purposes of this determination and issuance.

(b) Pursuant to 326 IAC 2-1 (Permit Review Rules) and 326 IAC 2-3 (Emission Offset), Emission Unit ID 02, 03 and 04, the T-Thermal Vaporizers, have retained the NO_x pound per hour and ton per year limitations of 11.1 pounds per hour and 3.3 tons per year. In the existing approvals, operation of Emission Unit ID 02, 03 and 04 was limited to a combined total 600 annual operating hours. Compliance was to be demonstrated utilizing AP-42 NO_x emission factors at maximum capacity on an hourly basis and at 600 combined total annual operating hours on an annual basis. In order to make such an hourly limitation practically enforceable, an annual fuel throughput restriction, per rolling twelve (12) consecutive month period, is imposed in this proposed FESOP, pursuant to 326 IAC 2-8-4, such that 326 IAC 2-3 does not apply (see fuel use calculation in TSD Appendix A page 2 of 8). In addition, the determination of the daily fuel consumption for Emission Unit ID 02, 03 and 04 has been retained.

(c) Pursuant to 326 IAC 2-1 (Permit Review Rules) 326 IAC 8-1-6 (New Facilities: General Reduction Requirements), Emission Unit ID 01 support equipment, the refrigerant compressor system has retained the requirement to provide, at a minimum, annual refrigerant consumption material balance losses.

Enforcement Issue

The source has the following Enforcement actions pending:

(1) ERMD issued a Notice of Violation (NOV) on December 9, 1998 for filing a FESOP application after December 13, 1996. The initial FESOP application for this existing source was received by ERMD on August 5, 1998.

Citizen's Gas and Coke Utility did not file a FESOP application before the December 1996 deadline because the Installation Permit of 1990 had limited the source's Federal potential to emit to less than any major source threshold. This was based on the source being subject to the New Source Performance Standard (NSPS) Subpart GG, which is a Federally applicable requirement, compliance monitoring provisions of the NSPS, the Installation Permit possibly being deemed practically enforceable and the proposed permit was public noticed during or after 1990.

Recommendation

The staff recommends to the Administrator that the FESOP be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively complete FESOP application for the purposes of this review was received on August 5, 1998. A walk through of the source to verify that Emission Unit ID 02, 03 and 04 were indirect heating units was conducted on December 10, 1998.

Emissions Calculations

See Appendix A: Emissions Calculations page 1 through 8 of 8 for detailed calculations.

Potential Emissions

Pursuant to 326 IAC 1-2-55, Potential Emissions are defined as "emissions of any one (1) pollutant which would be emitted from a facility, if that facility were operated without the use of pollution control equipment unless such control equipment is necessary for the facility to produce its normal product or is integral to the normal operation of the facility."

Pollutant	Potential Emissions (tons/year)
PM	9.9
PM-10	9.9
SO_2	0.8
VOC	25.8
CO	100.1
NO_x	178.7

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

See Appendix A: Emissions Calculations page 1 through 8 of 8 for detailed calculations.

HAP	Potential Emissions (tons/year)
Hexane	1.7
TOTAL	1.7

See Appendix A: Emissions Calculations page 1 through 8 of 8 for detailed calculations.

(a) The potential emissions (as defined in the Indiana Rule) of NO_x and CO are equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

(b) This source, otherwise required to obtain a Title V permit, has agreed to accept a permit with federally enforceable limits that restrict its PTE to below the Title V emission levels. Therefore, this source will be issued a Federally Enforceable State Operating Permit (FESOP), pursuant to 326 IAC 2-8.

(c) Fugitive Emissions
This type of operation is not one of the 28 listed source categories under 326 IAC 2-2. However, 40 CFR 60.330 Subpart GG (September 10, 1979) is an applicable New Source Performance Standard that was in effect prior to August 7, 1980. New Source Review guidance indicates fugitive emissions must be counted to determine PSD applicability for NSPS source categories in effect prior to August 7, 1980. Therefore, fugitive emissions, to the extent quantifiable, are counted toward determination of PSD and Emission Offset applicability. Non HAP VOC is the fugitive emission resulting from refrigerant losses in the compressor/heat exchanger that the turbine drives. Per GSD - 07, annual actual fugitive non HAP VOC emissions are estimated to be, by material balance, approximately, 17.6 tons per year. Per GSD - 07, source wide annual actual fugitive emissions are estimated to be, approximately, 17.6 tons per year non HAP VOC.

Limited Potential To Emit

(a) The source has accepted federally enforceable limitations that limit potential to emit NOx to 96.2 tons per 12 consecutive month period. This limit consists of:

(i) 86.9 tons per year for the significant activities; and

(ii) 9.3 tons per year for the insignificant activities.

(b) The table below summarizes the total limited potential to emit of the significant and insignificant emission units.

	Limited Potential to Emit (tons/year)						
Process/ facility	PM	PM-10	SO_2	VOC	CO	NO_X	HAPs
Emission Unit ID 01 Allison Gas Turbine	1.6	1.6	1.0	27.6	11.5	83.6	

Emission Unit ID 02, 03, 04 T-Thermal Vaporizers	0.1	0.1	0.2	0.1	0.8	3.3	
Insignificant Activities **Emission Unit ID's SBR-01, WEG-01 & EFP-01**	0.4	0.4	0.1	0.4	1.5	9.3	
Total Emissions	2.1	2.1	1.3	28.1	13.8	96.2	

County Attainment Status

The source is located in Marion County.

Pollutant	Status
PM-10	attainment
SO_2	attainment
NO_2	attainment
Ozone	attainment
CO	attainment
Lead	unclassifiable

(a) Volatile organic compounds (VOC) and oxides of nitrogen are precursors for the formation of ozone. Therefore, VOC and NO_X emissions are considered when evaluating the rule applicability relating to the ozone standards. Marion County has been designated as attainment or unclassifiable for ozone.

Federal Rule Applicability

(a) 40 CFR 60.330, Subpart GG (New Source Performance Standards - Standards of Performance for Stationary Gas Turbines)

Emission Unit ID 01, the Allison Gas Turbine is subject to 40 CFR 60.330, Subpart GG (New Source Performance Standards - Standards of Performance for Stationary Gas Turbines) and 326 IAC 12 (New Source Performance Standards) because the affected facility was constructed after October 3, 1977 and has a heat input at peak load greater than or equal to 10.7 gigajoules (38 MMBtu per hour x 10E06 Btu/MMBtu x 1.055E03 joules/Btu x gigajoule/10E09 joules = 40.1 gigajoules). Pursuant to 40 CFR 60.330 Subpart GG (Standards of Performance for Stationary Gas Turbines) and 326 IAC 12 (New Source Performance Standards):

(1) Sulfur dioxide emissions from Emission Unit ID 01 shall not exceed 0.015 percent by volume at 15 percent oxygen and on a dry basis. Or;

No owner or operator subject to the provisions of 40 CFR 60.330 Subpart GG shall burn in any stationary gas turbine any fuel which contains sulfur in excess of 0.8 percent by weight.

(2) Nitrogen oxides (NOx) emissions from Emission Unit ID 01 shall not exceed the following standard:

$$STD = 0.015 \; x \; (14.4/Y) + F$$

Where: STD = Allowable NO_x emissions in percent by volume at fifteen (15) percent oxygen and on a dry basis (ppm = percent by volume x 10^4).

Y = Manufacturer's rated heat rate at manufacturer's rated load or, actual measured heat rate based on the lower heating value of fuel as measured at peak load in kilojoules per watt hour. Y shall not exceed 14.4 kilojoules per watt hour.

F = The fuel-bound nitrogen allowance as defined in 40 CFR 60.332(a)(3).

Emission Unit ID 01 does not utilize wet injection. In order to issue an Installation Permit in 1990 to this source, the initial issuance had contained a maximum fuel-bound nitrogen content of 23.2 percent nitrogen by weight. Emission Unit ID 01 commenced operation in 1991. Pursuant to 40 CFR 60.8, this facility was supposed to be stack tested within 180 days of startup. The source did not submit a report of stack testing performed on September 6, 1991 that was witnessed by ERMD personnel. The stack test was to derive an allowable short term NO_x limit in ppm based on the fuel-bound nitrogen content of the fuel. In the absence of this data, the fuel-bound nitrogen content for the purposes of this review, determination and issuance is limited to a maximum fuel-bound nitrogen content of 23.2 percent by weight. The gas turbine fuel is supplied by pipeline and there is not expected to be a variation in the nitrogen content of the fuel such that a new F, per 40 CFR 60.332(a)(3), would result. The table below lists the fuel-bound nitrogen allowance(s) based on the nitrogen content of the fuel.

Fuel-bound nitrogen (N) (percent by weight)	**F (NO_x percent by volume)**
N less than or equal to 0.015	0.0
N greater than 0.015 but less than or equal to 0.1	0.04(N)
N greater than 0.1 but less than or equal to 0.25	0.004 + 0.0067(N - 0.1)
N greater than 0.25	0.005

The FESOP contains provisions to stack test this facility within 36 months of issuance.

(b) 40 CFR 60.40c Subpart Dc (New Source Performance Standards - Standards of Performance for Small Industrial - Commercial - Institutional Steam Generating Units)

Emission Unit ID 02, 03 and 04, the T-Thermal Vaporizers, are subject to 40 CFR 60.40c Subpart Dc (New Source Performance Standards - Standards of Performance for Small Industrial - Commercial - Institutional Steam Generating Units) and 326 IAC 12 (New Source Performance Standards). 40 CFR 60.41c defines *steam generating unit* as a device that combusts any fuel and produces steam or heats water or any other heat transfer medium. *Heat transfer medium* is defined as any material that is used to transfer heat from one point to another point. Subpart Dc is applicable to each affected facility for which construction, modification or reconstruction is commenced after June 9, 1989 and has a maximum design heat input capacity of 100 million Btu per hour or less but greater than or equal to 30 million Btu per hour. Emission Unit ID 02, 03 and 04 commenced construction after June 9, 1989 and each are greater than 30 million Btu per hour. However, these units combust natural gas only and the SO_2, PM, stack testing, opacity and quarterly provisions of the NSPS do not appear to apply to natural gas fired units. The only applicable provisions of Subpart Dc are:

(1) Initial reporting requirements on design heat input capacity, fuel(s) combusted, date of construction or reconstruction and actual startup date pursuant to the record keeping and reporting requirements of 40 CFR 60.48c.

(2) Pursuant to 40 CFR 60.48c(g), the Permittee shall record and maintain records of the amount(s) of fuel combusted during each day.

(c) 40 CFR 60.110b, Subpart Kb (Standards of Performance for Volatile Organic Liquid Storage Vessels for Which Construction, Reconstruction or Modification Commenced after July 23, 1984)

The ethylene storage tank, an Insignificant Activity, is subject to the requirements of the New Source Performance Standard, (40 CFR 60.110b, Subpart Kb Standards of Performance for Volatile Organic Liquid Storage Vessels for Which Construction, Reconstruction or Modification Commenced after July 23, 1984), due to the tank being installed in 1990 or after, the tank stores ethylene as a volatile organic liquid and the tank liquid storage capacity, 12,000 gallons, is in excess of 40 m^3 (approximately, 10,000 gallons) but is less than 75 m^3 storage capacity.

Because the storage tank is less than 75 m^3 storage capacity, 40 CFR Part 60.110b(b) exempts the notification requirements of 40 CFR Part 60 Subpart A (New Source Performance Standards - General Provisions). The only applicable provision(s) of Subpart Kb appears to be 40 CFR 60.116b which requires:

> The owner or operator of each storage vessel shall keep readily accessible records showing the dimension of the storage vessel. This record shall be kept for the life of the source.

Citizen's Gas and Coke Utility provided a fugitive emissions estimate of non HAP VOC losses from the liquefaction refrigeration process. These emission losses are expected to be from valves, flanges and seals in the refrigeration system. Actual annual non HAP VOC makeup is, per GSD -07, 17.6 tons per year.

(d) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP), 40 CFR Part 63, applicable to this source.

State Rule Applicability - Entire Source

326 IAC 1-6 Malfunctions, 326 IAC 2-8-12 Emergency Provision, 326 IAC 2-8-3(c)(6) Permit Application and 326 IAC 2-8-4(9) Permit Content

The source is initially subject to 326 IAC 1-6 because it is required to obtain a permit under 326 IAC 2 (Permit Review Rules). However, 326 IAC 1-6 emergency or upset provisions are superseded by 326 IAC 2-8-12 which requires the source to report verbally within four (4) business hours any emergency which results in an increase of an emission limitation or violation of an applicable rule. A written excess emissions report is required to be submitted within two (2) working days of any such occurrence. Pursuant to 326 IAC 2-8-4 Permit Content, records of all such occurrences are to be retained at the source for a period of five (5) years from the date of such occurrence(s) and shall be made available to IDEM, OAM and/or ERMD upon request.

326 IAC 1-6-3 Malfunctions: Preventive Maintenance (PM) Plans and 326 IAC 2-8-3 Permit Application

The source is initially subject to 326 IAC 1-6-3 because it is required to obtain a permit under 326 IAC 2 (Permit Review Rules). However, 326 IAC 1-6-3 is superseded by 326 IAC 2-8-3 which requires the source to comply with the provisions of 326 IAC 1-6-3. Any person responsible for operating any facility specified in 326 IAC 1-6 shall prepare and maintain a Preventive Maintenance Plan which includes the following information:

1) Identification of the individual(s) responsible for inspecting, maintaining and repairing emission control device(s).

2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions.

3) Identification and quantification of the replacement parts which will be kept in inventory and made available for quick replacement.

PM Plans shall be submitted to IDEM, OAM and/or ERMD upon request and shall be subject to review and approval by IDEM, OAM and/or ERMD.

326 IAC 1-7 Stack Height Provisions

This source does not appear to have potential or actual PM or SO_2 emissions greater than 25 tons per year. Therefore, the source, otherwise subject to 326 IAC 1-7 (Stack Height Provisions), is specifically exempted from GEP Stack height requirements of 326 IAC 1-7 (Stack Height Provisions).

326 IAC 2-1 State Construction and Operating Permits; Rule Applicability

The source initially commenced construction in 1990 and had a prior approval to commence construction from ERMD issued November 6, 1990 under 326 IAC 2-1-3 (Construction Permits) and 326 IAC 12 (NSPS) and, such that, 326 IAC 2-3 (Emission Offset) and 326 IAC 8-1-6 (Volatile Organic Compound Rules: New Facilities; General Reduction Requirements) do not apply. The initial operating permit was issued March 24, 1992.

The source is required, by 326 IAC 2, to obtain an operating permit for all significant emission units listed on Form GSD-06 because potential NO_x emissions from the Allison Gas Turbine, Emission

Unit ID 01 and the three (3) T-Thermal Vaporizers, Emission Unit ID 02, 03 and 04, each exceed 25 tons per year. PTE (without recognizing current permit/NSPS limitations as practically enforceable), prior to the issuance of a Part 70 Program Permit, exceeds 100 tons per year of NO_x and is therefore subject to the application and permitting requirements of 326 IAC 2-7 Part 70 Permit Program. However, the source is electing to obtain a FESOP under 326 IAC 2-8 Federally Enforceable State Operating Permit Program.

326 IAC 2-2 Prevention of Significant Deterioration (PSD)

At the time of Installation Permit issuance in 1990, this was a new source. It is not on the list of 28 major source categories as defined by 326 IAC 2-2-1. Because potential to emit is below 250 tons per year, the source did not appear to be and does not now appear to be subject to the provisions of 326 IAC 2-2.

326 IAC 2-3 Emission Offset

At the time of Installation Permit issuance in 1990, this was a new source. In addition, Marion County was nonattainment for ozone in 1990. Potential to emit NO_x exceeded 100 tons per year from the combination of significant emission units. Therefore, the source had potential to emit limited to less than 100 tons per year such that 326 IAC 2-3 did not apply. The source proposed and accepted operating hour restrictions to limit potential to emit in the Installation Permit. Emission Unit ID 01, the Allison Gas Turbine, was limited to 5200 annual operating hours and Emission Unit ID 02, 03 and 04, the T-Thermal Vaporizers, were limited to a combined total 600 annual operating hours such that 326 IAC 2-3 did not apply. In order to make such a limitation practically enforceable, an annual fuel throughput restriction, per rolling twelve (12) consecutive month period, is imposed in this proposed FESOP, pursuant to 326 IAC 2-8-4, such that 326 IAC 2-3 does not apply (see fuel use calculation in TSD Appendix A pages 1 and 2 of 8). The proposed FESOP incorporates the NO_x pound per hour and ton per year limitations of the Installation Permit such that 326 IAC 2-3 does not apply.

326 IAC 2-6 Emission Reporting

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than ten (10) tons per year of NO_x in Marion County. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by April 15 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

326 IAC 2-7 Part 70 Permit Program

The source is required, by 326 IAC 2-7, to obtain an operating permit for all significant emission units listed on Form GSD-06 because potential NO_x emissions from the Allison Gas Turbine, Emission Unit ID 01 and the three (3) T-Thermal Vaporizers, Emission Unit ID 02, 03 and 04, each exceed 25 tons per year. PTE (without recognizing current permit/NSPS limitations as practically enforceable), prior to the issuance of a Part 70 Program Permit, exceeds 100 tons per year of NO_x and is therefore subject to the application and permitting requirements of 326 IAC 2-7 Part 70 Permit Program. However, actual emissions are reported to be, per GSD - 07, less than any major source threshold. The source is electing to obtain a FESOP under 326 IAC 2-8 Federally Enforceable State Operating Permit Program.

326 IAC 2-8 Federally Enforceable State Operating Permit Program

Actual emissions have been reported to be, per GSD-07, less than any major source threshold. Therefore, the source is electing to obtain a FESOP under 326 IAC 2-8 Federally Enforceable State Operating Permit Program and wishes to have Installation Permit operating hour restrictions incorporated into a proposed FESOP to limit source wide NO_x to less than 100 tons per year. In order to make such a limitation practically enforceable, an annual fuel throughput restriction, per rolling twelve (12) consecutive month period, is imposed in this proposed FESOP, pursuant to 326 IAC 2-8-4, such that 326 IAC 2-3 does not apply (see fuel use calculation in TSD Appendix A pages 1 and 2 of 8). The proposed FESOP incorporates the NO_x pound per hour and ton per year limitations of the Installation Permit such that 326 IAC 2-3 does not apply.

326 IAC 5-1 Opacity Emissions Limitations

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of thirty percent (30%) opacity in twenty-four (24) consecutive readings as determined by 326 IAC 5-1-4,

(b) Opacity shall not exceed sixty percent (60%) opacity for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR Appendix A Method 9 in a six (6) hour period.

326 IAC 7 Sulfur Dioxide Rules Limitations

326 IAC 7 does not appear to apply as neither the source nor any Emission Unit ID have potential SO_2 emissions equal to or greater than 25 tons per year.

State Rule Applicability - Individual Facilities

Emission Unit ID 01 - Allison Gas Turbine

326 IAC 2-3 Emission Offset and 326 IAC 2-8 FESOP Program

The Installation Permit of November 6, 1990 limited NO_x emissions to 83.6 tons per year such that 326 IAC 2-3 did not apply. The long term limitation in tons per year was derived from the NO_x emission limitation equation of 40 CFR 60.332(a)(2) Subpart GG of 0.0150 x 14.4/Y + F, where the maximum fuel bound nitrogen content of the fuel being 23.2 percent by weight and operation at 5200 annual operating hours. The source wishes to have NO_x emissions limited to 40 CFR 60.332(a)(2), 83.6 tons per year and 5200 annual operating hours under 326 IAC 2-8 such that 326 IAC 2-3 and 326 IAC 2-7 does not apply. In order to make such a limitation practically enforceable, an annual fuel throughput restriction, per rolling twelve (12) consecutive month period, is imposed in this proposed FESOP, pursuant to 326 IAC 2-8-4, such that 326 IAC 2-3 does not apply (see fuel use calculation in TSD Appendix A page 1 of 8). The proposed FESOP incorporates the NO_x pound per hour and ton per year limitations of the Installation Permit such that 326 IAC 2-3 does not apply.

326 IAC 6 Nonattainment Area Particulate Limitations

Emission Unit ID 01 involves natural gas combustion and is not classified as indirect heating. A gaseous fuel is consumed and does not appear to have an applicable process weight rate limitation. Source wide potential to emit PM is less than 100 tons per year and neither the source nor any facility appears to have actual emissions of greater than ten (10) tons per year. There appears to be no gas turbine PM rules. As a result, there appears to be no applicable PM emission limit.

326 IAC 7 Sulfur Dioxide Rules

Emission Unit ID 01 involves natural gas combustion. A gaseous fuel is consumed and does not appear to have appreciable SO_2 emissions. Potential SO_2 emissions appear to be lower than the applicability threshold (25 tons per year) of 326 IAC 7. Therefore, 326 IAC 7 does not apply. However, 326 IAC 12 (NSPS) contains provisions for SO_2 emissions **or** fuel sulfur content as adopted by reference from 40 CFR 60.333 Subpart GG. (See TSD Section **Federal Rule Applicability** 40 CFR 60.330, Subpart GG (New Source Performance Standards - Standards of Performance for Stationary Gas Turbines) for discussion of applicability).

326 IAC 8-1-6 New Facilities: General Reduction Requirements

Fugitive VOC emissions are counted towards the source wide potential to emit because 40 CFR 60.330 Subpart GG, promulgated September 10, 1979, was in effect prior to August 7, 1980. New Source Review rules and guidance indicates that fugitive emissions are counted towards PSD potential to emit if an NSPS category was in effect as of August 7, 1980. All source wide fugitive emissions appear to be from support equipment for Emission Unit ID 01, the Allison Gas Turbine, and the source estimates actual annual fugitive VOC emissions to be, approximately, 17.6 tons per year. The possibility exists that an annual loss will fluctuate from 17.6 tons per year. As a result, fugitive VOC emissions are limited to less than 24.0 tons per year such that 326 IAC 8-1-6 does not apply.

326 IAC 12 New Source Performance Standards

See TSD Section **Federal Rule Applicability** 40 CFR 60.330, Subpart GG (New Source Performance Standards - Standards of Performance for Stationary Gas Turbines) for discussion of applicability.

Emission Unit ID 02, 03 and 04 - T-Thermal Vaporizers

326 IAC 2-3 Emission Offset and 326 IAC 2-8 FESOP Program

The Installation Permit of November 6, 1990 limited NO_x emissions to 1.11 tons per year for each Emission Unit ID such that 326 IAC 2-3 did not apply. The T-Thermal Vaporizers are significant Emission Units and the long term limitation in tons per year was derived from the AP-42 NO_x emission factor at 200 annual operating hours or a combined total of 600 annual operating hours for any combination of operating vaporizers. The source wishes to have NO_x emissions limited to 1.1 tons per year for each Emission Unit or 3.3 tons per year for any combination of vaporizers in operation and 200 annual operating hours or 600 annual combined operating hours under 326 IAC 2-8 such that 326 IAC 2-3 and 326 IAC 2-7 does not apply. In order to make such a limitation practically enforceable, an annual fuel throughput restriction, per rolling twelve (12) consecutive month period, is imposed in this proposed FESOP, pursuant to 326 IAC 2-8-4, such that 326 IAC 2-3 does not apply (see fuel use calculation in TSD Appendix A page 2 of 8).

The proposed FESOP incorporates the NO_x pound per hour and ton per year limitations of the Installation Permit such that 326 IAC 2-3 does not apply.

326 IAC 6-2-4 Emission Limitations for Facilities Specified in 326 IAC 6-2-1(c) (Particulate Emission Limitations for Sources of Indirect Heating

The three (3) T-Thermal Vaporizers are determined to be indirect heating because each Vaporizer is an indirect fired type heat exchanger with the burner and process tube coil all contained within a single vessel. The burner combustion products are discharged into a water bath which is used as the heat transfer medium for vaporizing the process liquid (liquefied natural gas) in the tube coil. Because these units are natural gas fired, 40 CFR 60.40c Subpart Dc does not have an emission limitation or opacity standard. However, these Emission Units are indirect heaters and, therefore, subject to the PM emission limitation of 326 IAC 6-2-4. Particulate emissions from indirect heating facilities constructed after September 21, 1983 shall be limited by the following equation:

$$Pt = 1.09/Q^{0.26}$$

Where: Pt = pounds of particulate matter emitted per million Btu (lb/MMBtu) heat input

Q = total source maximum operating capacity rating in million Btu per hour

For Q = 216 million Btu per hour (72.0 million Btu x 3 vaporizers), Pt = 0.27 pounds per million Btu. At an emission factor of 7.6 pounds per million cubic feet (0.0076 pounds per million Btu), each vaporizer appears to be in compliance with the PM emission limitation of 326 IAC 6-2-4. See Appendix A page 2 of 8.

326 IAC 12 New Source Performance Standards

See TSD Section **Federal Rule Applicability** 40 CFR 60.40c Subpart Dc (New Source Performance Standards - Standards of Performance for Small Industrial - Commercial - Institutional Steam Generating Units) for discussion of applicability.

Emission Unit ID WEG-01 and EFP-01 - Waukesha Emergency Generator & Emergency Fire Pump

326 IAC 2-8 FESOP Program

As emergency generator and emergency equipment, each Emission Unit ID is limited to 500 annual operating hours such that 326 IAC 2-7 does not apply. Source wide potential to emit NO_x exceeds 100 tons per year. The combination of significant and insignificant NO_x emissions needs to be limited such that 326 IAC 2-3 (Emissions Offset) and 326 IAC 2-7 (Part 70 Permit Program) do not apply. At maximum capacity and 500 annual operating hours, this equates to 2.98 MMCF/yr of natural gas consumption in Emission Unit ID WEG-01 and 80.0 gallons per year of diesel fuel consumption in Emission Unit ID EFP-01.

326 IAC 6 Particulate Rules

Neither Emission Unit ID is classified as indirect heating and source wide potential PM emissions do not exceed 100 tons per year nor do actual PM emissions exceed 10 tons per year. A gaseous fuel, natural gas, is consumed in Emission Unit ID WEG-01. Therefore, there appears to be no applicable process weight rate limitation. As a result, there appears to be no applicable short term PM limit for these Emission Units.

Emission Unit ID Ethylene Storage Tank

326 IAC 12 New Source Performance Standards

See TSD Section **Federal Rule Applicability** 40 CFR 60.110b, Subpart Kb (Standards of Performance for Volatile Organic Liquid Storage Vessels for Which Construction, Reconstruction or Modification Commenced after July 23, 1984) for discussion of applicability.

Compliance Requirements

Permits issued under 326 IAC 2-8 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAM, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-8-4. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in permit Section D are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also in permit Section D. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

(a) Emission Unit ID 01, the Allison Gas Turbine, has applicable compliance monitoring conditions as specified in 40 CFR 60.334 Subpart GG, 326 IAC 12 (NSPS) and below:

(1) The Permittee shall monitor sulfur content and nitrogen content of the fuel being fired in the turbine. The frequency of determination of these values, if supplied its fuel without intermediate bulk storage, shall be determined and recorded daily. Owners, operators or fuel vendors may develop custom schedules for the determination of the values based on the design and operation of the affected facility and the characteristics of the fuel supply. These custom schedules shall be substantiated with data and must be approved by the Commissioner before they can be used to comply with 40 CFR 60.334 Subpart GG.

These monitoring conditions are necessary to ensure compliance with 40 CFR 60.330 Subpart GG and 326 IAC 12 (NSPS).

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 187 hazardous air pollutants set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) FESOP Application Form GSD-08.

(a) This source will emit levels of air toxics less than those which constitute a major source according to Section 112 of the 1990 Amendments to Clean Air Act.

(b) See attached calculations for detailed air toxic calculations (Appendix A page 1 through 7).

Conclusion

The operation of this natural gas transmission and storage operation will be subject to the conditions of the attached proposed **FESOP No. F097-10018-00141.**

APPENDIX A

Office of Air Management
and
City of Indianapolis
Environmental Resources Management Division

Addendum to the
Technical Support Document (TSD) for a
Federally Enforceable State Operating Permit (FESOP)

Source Name:	**Citizens Gas and Coke Utility - LNG North**
Source Location:	**4536 West 86th Street, Indianapolis, Indiana 46268**
County:	**Marion**
SIC Code:	**4924**
Operation Permit No.:	**F097-10018-00141**
Permit Reviewer:	**M. Caraher**

On February 27, 1999, the Environmental Resources Management Division (ERMD) had a notice published in the Indianapolis Star Newspaper in Indianapolis, Indiana, stating that Citizens Gas & Coke Utility had applied for a Federally Enforceable State Operating Permit (FESOP) relating to the operation of a liquefied natural gas storage facility under a Standard Industrial Classification Code (SIC) number of 4924 (establishments engaged in the transmission and/or storage of natural gas for sale). The notice also stated that ERMD proposed to issue a FESOP for this operation and provided information on how the public could review the proposed FESOP and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this FESOP should be issued as proposed.

During the thirty (30) day public notice period, ERMD received written comments from Citizens Gas & Coke Utility and the Indiana Department of Environmental Management (IDEM).

ERMD response to these paraphrased comments are stated below along with the following changes to the FESOP:

Public Notice Version FESOP Comments

Comment # 1: IDEM, OAM Compliance provided written comments on March 3, 1999 that no additional revisions or changes were necessary at that time.

Title Page

Comment # 2: Citizens Gas & Coke Utility (herein referenced as CG&CU) stated that all references to the company name, as listed in the TSD and draft FESOP, should drop the apostrophe from Citizen's.

Response: All reference to the source name throughout the draft public notice version FESOP and for this TSD Addendum has been changed from Citizen's Gas & Coke Utility to **Citizens Gas & Coke Utility**. Reference to the source's name appears mainly on the cover page, all headers and all reporting forms.

Section C

Comment # 3: In reference to Section C.18 General Reporting Requirements, "Currently annual reports are required to be submitted and certified pursuant to emissions. The submission of Quarterly Compliance Monitoring is in excess of requirements. Based on previous annual usage and operating hours of equipment (actual hours of Unit ID - 01 is 18,714 hours in 8 years of operation or average of 2400 hours per year) at this plant, the increase in reporting seems unnecessary. The annual report identifies fuel gas usage by quarter giving IDEM the information necessary for compliance with the general annual reporting requirement. CG & CU understands that IDEM wants to be assured that businesses are complying with the permit and has its option the basis for wanting reporting every quarter."

Response: The Compliance Monitoring Report is a report form listing deviations from compliance monitoring conditions found in any Section D of the FESOP. This report form is not intended to track emissions or report on the level or tonnage of emissions. Currently, Section D.1 of the FESOP is the only D Section that contains any compliance monitoring provisions. The report is intended to document whether nitrogen and sulfur content are being documented at the time interval rate specified by Subpart GG and/or Section D.1. Compliance monitoring reporting is required pursuant to 326 IAC 2-8-4(3)(C) which states "With respect to reporting, a FESOP shall incorporate all applicable reporting requirements and requirements for the following: (i) Submittal of reports of any required monitoring at least every six (6) months. All instances of deviations from FESOP requirements must be clearly identified in such reports."

The FESOP was initially proposed to require quarterly reporting of compliance monitoring. However, nothing in Subpart GG requires quarterly reporting of emissions or compliance. 326 IAC 2-8-4(3)(C) is an applicable requirement and shall remain in the FESOP as applicable to any Emission Unit that has compliance monitoring provisions stated in Section D. Since the time interval for fuel sulfur content monitoring is being changed to at least once every six months (see Comment # 5 and response), the Compliance Monitoring Report is revised from being required quarterly to being required semi-annually. Condition C.18 now states:

C.18 General Reporting Requirements [326 IAC 2-8-4(3)(C)]

(a) To affirm that the source has met all the compliance monitoring requirements stated in this permit the source shall submit a ~~Quarterly~~ **Semi - Annual** Compliance Monitoring Report. Any deviation from the requirements and the date(s) of each deviation must be reported. The Compliance Monitoring Report shall include the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

Environmental Resources Management Division
Air Quality Management Section, Compliance Data
2700 South Belmont Avenue
Indianapolis, Indiana 46221

(c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, and ERMD on or before the date it is due.

(d) Unless otherwise specified in this permit, any ~~quarterly~~ **semi - annual** report shall be submitted within thirty (30) days of the end of the reporting period. The report(s) do not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(e) All instances of deviations as described in Section B.15- Deviations from Permit Requirements Conditions must be clearly identified in such reports. The Emergency/Deviation Occurrence Report does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.

(g) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

Section D.1

Comment # 4: In reference to Condition D.1.6 Testing Requirements, the "time frame referenced may not be sufficient to allow conducting testing while the unit is on line at 100% load. A one year range, 36 to 48 months, would be preferable to accommodate testing under loaded conditions during our liquefaction period. Also, the Allison Gas Turbine has approximately 17,000 hours of operation on the unit since the previous stack emission test was completed in September 1991."

Response: ERMD understands the inherent intermittent nature of hours of operation for this utility. Therefore, Condition D.1.6 is modified as follows:

D.1.6 Testing Requirements [326 IAC 2-8-5(a)(1),(4)]

During the period between ~~30 and 36~~ **36 and 48** months after issuance of this permit, the Permittee shall perform NO_x emissions testing utilizing 40 CFR Part 60, Appendix A and 40 CFR Part 60.335 or other methods as approved by the Commissioner. In addition to these requirements, IDEM and/or ERMD may require compliance testing when necessary to determine if Emission Unit ID 01 is in compliance.

Comment # 5: In reference to Condition D.1.7 New Source Performance Standards (NSPS), "The nitrogen content of the fuel-bound gas is being analyzed at regular intervals by a Daniels Gas Chromatograph that can identify the amount of nitrogen percent by weight used in the fuel gas. However, the chromatograph does not identify the amount of sulfur in the fuel gas stream. The natural gas suppliers guarantee that the sulfur content is less that 18 ppm as pipeline quality gas.

Section 326 IAC 12 NSPS, which contains the provisions for SO_2 emissions or fuel sulfur content as adopted by reference from 40 CFR 60.333 Subpart GG, is related to high sulfur content in liquid fuels rather than gaseous fuels." Daily sulfur content monitoring is not practical given the fuel that is burned at this source and the supplier guarantee, over the operating time of the existence of this source, of fuel sulfur content well below 0.8% sulfur by weight.

Response: Condition # 3 of Installation Permit Number 900141-01 issued by ERMD November 6, 1990 and Condition # 3 of the Certificate of Operation issued by ERMD March 24, 1992 required Allison Gas Turbine SO_2 emissions to be limited to 0.01 pounds per million Btu pursuant to Indianapolis Air Pollution Control Board Regulation IV-4 Sulfur Dioxide Emissions. This limitation was more stringent than Subpart GG. Because the source does not have the potential to emit SO_2 in excess of 25.0 tons per year, 326 IAC 7 Sulfur Dioxide Rules does not appear to apply. Therefore, the applicable limit for the purposes of FESOP issuance reverts to Subpart GG. For the purposes of FESOP issuance, compliance monitoring for weight percent sulfur was instituted for the draft public notice permit. However, USEPA and Region V, as well as IDEM, have previously approved policy for "custom schedules" for the monitoring of sulfur content which is allowed pursuant to 40 CFR 60.334(b)(2). 40 CFR 60.334(b)(2) states, "Owners, operators or fuel vendors may develop custom schedules for determination of the values based on the design and operation of the affected facility and the characteristic of the fuel supply. These custom schedules must be substantiated with data and must be approved by the Administrator before they can be used to comply with paragraph (b) of this section ('daily fuel sulfur content monitoring if the fuel is supplied without intermediate bulk storage')." Prior to the draft public notice period, a custom schedule for sulfur content modeling was not proposed.

In response to the public notice period to submit comments, CG & CU has submitted documentation that the fuel supplier of natural gas has guaranteed that total sulfur will not exceed 20 grains per 100 cubic feet of natural gas. Given the density of natural gas (pursuant to AP-42 Appendix A) as 1 pound per 23.8 cubic feet or 0.042 pound per cubic foot, 20 grains equates to 0.068% sulfur by weight in the natural gas supply.

$$\frac{\frac{20\ gr\ S\ /100\ ft^3}{1\ lb/7000\ gr}}{0.042\ lb/ft^3} \times 100\ '\ 0.068\ \%\ S$$

EPA policy guidance on the approval of custom schedules is outlined in John Rasnic's, then Chief of the USEPA's Stationary Source Compliance Division, August 14, 1987 memo. At a minimum, no less than semiannual monitoring, utilizing an ASTM test method stated in 40 CFR 60.335(d), shall be performed to determine the sulfur content of the gaseous fuel being fired. Pursuant to 40 CFR 60.335(e), the analysis may be performed by the owner or operator, a service contractor, the fuel vendor or any other qualified vendor. As a result, Condition D.1.7 now states:

D.1.7 New Source Performance Standards (NSPS) [326 IAC 12][40 CFR 60.330 Subpart GG]

Pursuant to 326 IAC 12 (New Source Performance Standards) and 40 CFR 60.334(c) Subpart GG (Standards of Performance for Stationary Gas Turbines), compliance with the SO_2 and NO_x emission limitations of Section D.1.3 of this Permit shall be determined ~~on a daily basis~~ based on the fuel sulfur and fuel nitrogen content of the fuel being fired in Emission Unit ID 01. Excess emissions shall be determined as:

(1) Any period during which the fuel-bound nitrogen content of gas turbine fuel is greater than 23.2 percent by weight.

(2) Any ~~daily~~ period during which the sulfur content of the fuel being fired in the gas turbine exceeds 0.8 percent by weight.

Owners, operators or fuel vendors may develop custom schedules for determination of sulfur and nitrogen content values based on the design and operation of Emission Unit ID 01 and the characteristics of the fuel supply. These custom schedules shall be substantiated with data and must be approved by IDEM and ERMD before they can be used to comply with the daily content monitoring requirement of 326 IAC 12 (NSPS) and 40 CFR 60.334(b) Subpart GG.

Comment # 6: In reference to Condition D.1.8 VOC Emissions, Condition D.1.8 "should indicate that the VOC loss is from refrigerant used in the gas liquefaction compressor/heat exchange system, as listed in D.1.4."

Response: Condition # 5(c) of Installation Permit Number 900141-01 issued by ERMD November 6, 1990 and Condition # 6(d) of the Certificate of Operation issued by ERMD March 24, 1992 both required record keeping of annual refrigerant consumption. Fugitive VOC emissions in excess of 25.0 tons per year would be regulated by 326 IAC 8-1-6 General Provisions Relating to VOC Rules: General Reduction Requirements for New Facilities. Fugitive VOC emissions are being tracked such that it does not apply. Therefore, Condition D.1.8 was modified to add the following wording appearing in bold face type and now appears as:

D.1.8 VOC Emissions

Compliance with Condition D.1.4 shall be demonstrated at the end of each month based on the total **fugitive** volatile organic compound material balance loss **from refrigerant used in the gas liquefaction compressor/heat exchange system** for the most recent twelve (12) month period.

Comment # 7: Due to the deletion of the statement in Condition D.1.7 that compliance shall be determined on a daily basis, ERMD noted that changes to compliance monitoring, record keeping and reporting in Section D.1. should be made. CG & CU submitted documentation as support for a custom schedule for monitoring of fuel sulfur content. In addition, all quarterly reporting of fuel use and fugitive VOC emissions should be changed to reflect semi - annual reporting.

Response: The approval of a 'custom schedule,' as allowed by 40 CFR 60.334 and John Rasnic's August 14, 1987 policy guidance on custom schedules, has enabled compliance monitoring reporting to be done semi-annually. To ease the reporting burden on the source, reporting forms for natural gas throughput and VOC loss are being changed to semi - annual reporting as well. ERMD has made the following changes to Condition D.1.9, D.1.10 and D.1.11:

D.1.9 Monitoring [326 IAC 12][40 CFR 60.334(b)]

(a) The Permittee shall monitor, on a daily basis, the ~~sulfur and~~ nitrogen content of the natural gas being fired in Emission Unit ID 01. **The Permittee shall monitor, at least one (1) time per semi-annual calendar period, the sulfur content of the natural gas being fired in Emission Unit ID 01.** The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C.13 - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

(b) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

D.1.10 Record Keeping Requirements

(a) To document compliance with Conditions D.1.2, D.1.3 and D.1.4, the Permittee shall maintain records in accordance with (1) through (3) below. Records maintained shall be complete and sufficient to establish compliance with the NO_x, SO_2 and VOC emission limits established in Condition D.1.2, D.1.3 and D.1.4.

(1) Monthly records of daily natural gas fuel consumption in Emission Unit ID 01.

(2) Daily records of ~~sulfur and~~ nitrogen content of natural gas fired in Emission Unit ID 01 **and records of semi - annual sulfur content of natural gas fired in Emission Unit ID 01.**

(3) Monthly material balance loss of volatile organic compounds in the refrigerant compressor system of Emission Unit ID 01.

(b) All records shall be maintained in accordance with Section C.17 - General Record Keeping Requirements, of this permit.

D.1.11 Reporting Requirements

(a) A ~~quarterly~~ **semi - annual** summary of the information listed below to document compliance with Condition D.1.2 and D.1.4 shall be submitted to the address(es) listed in Section C.18 - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the ~~quarter~~ **semi - annual calendar period** being reported.

(1) Rolling twelve (12) consecutive month period natural gas consumption in Emission Unit ID 01.

(2) Fugitive VOC material balance loss from refrigerant used in the gas liquefaction/heat exchange system per rolling twelve (12) consecutive month period.

(b) Pursuant to 326 IAC 12 (NSPS) and 40 CFR 60.334(c)(1) Subpart GG, any period during which the fuel-bound nitrogen content of gas turbine fuel consumed in Emission Unit ID 01 exceeds the maximum fuel-bound nitrogen content allowed by 40 CFR 60.332(a)(3) which has been determined to be 23.2 percent by weight.

(c) Pursuant to 326 IAC 12 (NSPS) and 40 CFR 60.334(c)(2) Subpart GG, any ~~daily~~ period during which the sulfur content of the natural gas consumed in Emission Unit ID 01 exceeds 0.8 percent by weight.

Section D.2

Comment # 8: CG & CU commented that Condition D.2.4 Preventive Maintenance Plan should not reference a control device.

Response: The Preventive Maintenance Plan requirement must be included in for each FESOP pursuant to 326 IAC 2-8-4(9) FESOP Program; Permit Content. This rule refers back to the Preventive Maintenance Plan requirement as described in 326 IAC 1-6-3 Preventive Maintenance Plans. The requirements in 326 IAC 1-6-1 and 326 IAC 1-6-3 specify that the requirement to maintain a Preventive Maintenance Plan is applicable to any facility required to obtain a permit under 326 IAC 2-1-2 (Registration) and 326 IAC 2-1-4 (Operating Permits). The Preventive Maintenance Plan rule sets out the requirements for:

(1) Identification of the individuals responsible for inspecting, maintaining and repairing the emission control equipment (326 IAC 1-6-3(a)(1)),

(2) The description of the items or conditions in the facility that will be inspected and the inspection schedule for said items or conditions (326 IAC 1-6-3(a)(2)), and

(3) The identification and quantification of the replacement parts for the facility which the permittee will maintain in inventory for quick replacement (326 IAC 1-6-3(a)(2).

It is clear from the structure of the wording in 326 IAC 1-6-3 that the PM Plan requirement affects the entirety of the applicable facilities. Only 326 IAC 1-6-3(a)(1) is limited, in that it requires identification of the personnel in charge of only the emission control equipment, and not any other facility equipment. The Commissioner/Administrator may require changes in the maintenance plan to reduce excessive malfunctions in any control device or combustion or process equipment under 326 IAC 1-6-5.

ERMD recognizes that Emission Unit ID 02, 03 and 04 do not have add on air pollution control equipment. As a result, the wording of Condition D.2.4 has been amended to delete reference to control equipment and now states:

D.2.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B.13 - Preventive Maintenance Plan, of this permit, is required for **Emission Unit ID 02, 03 and 04** ~~this facility and its control device~~.

Comment # 9: ERMD has noted that Condition D.2.7 Reporting Requirements would need to be updated to reflect semi - annual reporting natural gas throughput.

Response: ERMD updated Condition D.2.7 which now states:

D.2.7 Reporting Requirements

A ~~quarterly~~ **semi - annual calendar period** summary of combined natural gas consumption in Emission Unit ID 02, 03 and 04 shall be submitted to the address(es) listed in Section C.18 - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the ~~quarter~~ **semi - annual calendar period** being reported.

Section D.3

Comment # 10: CG & CU commented that the Insignificant Activity equipment listed in Section D.3 should be separated into two sections, one for the ethylene tank and one for the emergency generator and the fire pump to make it clearer regarding applicable limitations. As the section reads now, it appears that 40 CFR 60 Subpart A General Provisions may apply to all three items listed in D.3.

Response: Section D.3 is meant to contain all Insignificant Activities at the source that may have an applicable requirement. Since Insignificant Activities normally may not have Compliance Monitoring or Reporting conditions, it is best to have one Section describe all Insignificant Activity equipment that does have an applicable requirement. Emergency generators and stationary fire pumps are identified in the listing of Insignificant Activities pursuant to 326 IAC 2-7-1 and Form GSD 10a Insignificant Activities. However, NO_x throughput limitations were limited for these units in order to have source wide PTE to emit NO_x to less that 100 tons per year, and as a result, is now an applicable requirement under 326 IAC 2-8-4 FESOP; Permit Content. PTE was limited, based on EPA and IDEM guidance for Emergency Generators to operation of no more than 500 operating hours per year. The Ethylene storage tank has an applicable requirement pursuant to 40 CFR 60.110b Subpart Kb which requires the source to keep a record of tank capacity and as a result, 40 CFR 60 Subpart A applies. Condition D.3.1 General Provisions Relating to NSPS has been reworded to more clearly identify what Emission Unit the Condition applies to and now states:

D.3.1 General Provisions Relating to NSPS [326 IAC 12-1][40 CFR Part 60, Subpart A]

The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, apply **to Emission Unit ID Ethylene Storage Tank as described in this Section** except when otherwise specified in 40 CFR Part 60, Subpart Kb (New Source Performance Standards - Standards of Performance for Volatile Organic Liquid Storage Vessels for Which Construction, Reconstruction or Modification Commenced after July 23, 1984).

Comment # 11: CG & CU stated that Condition D.3.2(b) Nitrogen Oxides (NO_x) lists the annual diesel fuel consumption limit for Emission Unit ID EFP-01 as 80 gallons per year. The diesel fuel usage equivalent to 500 annual operating hours at maximum capacity is 4379 gallons per year. 80 gallons is also listed in the TSD on page 13 and in Appendix A on page 5.

Response: An error was made by ERMD in calculating the maximum fuel consumption for Emission Unit ID EFP-01 based on 500 annual operating hours. However, the error does not affect the initial estimate of PTE from this Emission Unit. This TSD Addendum serves to correct and update the TSD without making changes to the draft public notice version of the TSD. The correct derivation of fuel consumption for EFP-01 at 500 annual operating hours is:

1.2 *MMbtu/hr x* 1 *gal*/0.137 *MMBtu x* 500 *hours/year* ' 4379.6 *gal/year*

TSD Appendix A page 5 has been amended to state 4379 gallons and Condition D.3.2(b) has been revised and now states:

D.3.2 Nitrogen Oxides (NO_x) [326 IAC 2-8-4]

Pursuant to 326 IAC 2-8-4 (FESOP; Permit Content):

(a) Emission Unit ID WEG-01 is limited to 3.0 million cubic feet of natural gas consumption per rolling twelve (12) consecutive month period. This limitation is equivalent to 500 annual operating hours at maximum capacity.

(b) Emission Unit ID EFP-01 is limited to ~~80.0~~ **4379** gallons per year of diesel fuel consumption per rolling twelve (12) consecutive month period. This limitation is equivalent to 500 annual operating hours at maximum capacity.

Comment # 12: ERMD internal review following the draft public notice period concluded that Condition D.3.3 Preventive Maintenance Plan should be removed for Insignificant Activities as these units would be classified as a Registration level unit

Response: Condition D.3.3 Preventive Maintenance Plan is now deleted from the FESOP. Remaining Conditions D.3.4 Testing Requirements and D.3.5 Reporting Requirements have been renumbered, respectively D.3.3 and D.3.4

Reporting Forms

Comment # 13: ERMD has noted that the change in compliance monitoring reporting to semi - annually should enable most all form reporting to be done semi-annually as well in order to ease the reporting burden on the source.

Response: The reporting form Emission Unit ID 01 natural gas consumption on page 39, the reporting form for Emission ID 01 fugitive VOC loss on page 40, the reporting form for Emission Unit ID 02, 03 and 04 natural gas consumption on page 41 and the compliance monitoring report form on page 42 all now have the title changed to from ~~Quarterly~~ to **Semi - Annual** reporting.

Comment: 14: IDEM, OAM has instructed ERMD to list the Limited Potential to Emit table for any source for which a TSD Addendum is prepared.

Response: The revisions made to the draft FESOP following the comment period have not changed the Limited Potential to Emit for this source.

	Limited Potential to Emit (tons/year)						
Process/ facility	PM	PM-10	SO_2	VOC	CO	NO_X	HAPs
Emission Unit ID 01 Allison Gas Turbine	1.6	1.6	1.0	27.6	11.5	83.6	
Emission Unit ID 02, 03, 04 T-Thermal Vaporizers	0.1	0.1	0.2	0.1	0.8	3.3	
Insignificant Activities **Emission Unit ID's SBR-01, WEG-01 & EFP-01**	0.4	0.4	0.1	0.4	1.5	9.3	
Total Emissions	2.1	2.1	1.3	28.1	13.8	96.2	

Emission Unit ID 01
Allison Gas Turbine

Appendix A: Emission Calculations
Natural Gas - Gas Turbine - Simple Cycle
(for Refrigerant Compressor)

Company Name: Citizen's Gas & Coke Utility (LNG North)
Address City IN Zip: 4536 West 86th Street Indianapolis, IN 46268
CP:
Plt ID: F087-10018-00141
Reviewer: M. Caraher
Date: 12/15/98

Heat Input Capacity
MMBtu/hr

38.00 stated on GSD Form

Horsepower output

4018.3 stated on GSD Form

	Pollutant					
	PM	PM10	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	14.0	14.0	0.6	450.0	16.4	115.0
Potential Emissions in pounds/hr	0.5	0.5	0.0	17.1	0.6	4.4
Potential Emission in tons/yr	2.3	2.3	0.1	74.9	2.7	19.1

Methodology

Emfacs in lb/MMCF for PM, PM10, SO2, VOC & CO from SCC# 2-01-002-01 Internal Combustion Engines - Electrical Generation (SIC = 49) Natural Gas - Turbine

NOx emfac from Application where NOx = 17.1 #/hr / 38 MMBtu/hr = 0.45 #/MMBtu or 450 #/MMCF which is > than SCC 2-01-002-01 & AP-42 Table 3.1-2

Emissions (pounds/hr) = MMBtu / 1000 * lbs/MMCF
Emission (tons/yr) = MMBtu/hr / 1000 * lbs/MMCF * 8760/2000

Fuel Use Limitation corresponding to 5200 annual operating hours and for Compliance with 2-3 & 2-8-4 Limits

38 MMBtu / hr x ft^3 / 1000 Btu x 10^6 Btu / MMBtu x MMCF / 10^6 ft^3 = 0.038 MMCF / hr (0.044 MMCF / hr if LHV of fuel = 860 Btu / ft^3)
0.038 MMCF / hr x 5200 hrs /yr = 197.6 MMCF / yr Fuel Use limit per rolling 12 consecutive month period
check: 197.6 MMCF / yr x 450 lbs NOx / MMCF x ton / 2000 lbs = 44.5 tons NOx / yr (51.7 tons / yr if LHV of fuel = 860 Btu / ft^3)

Comparison of Emfacs available

	Pollutant					
EMFAC	PM	PM10	SO2	NOx	VOC	CO
Emfacs in lb/MMCF (SCC 2-01-002-01)	14.0	14.0	0.6	413.0	16.4	115.0
Emfacs in lb/MMBtu (AP-42 Table 3.1-2)	0.140	0.140	0.94(S)	0.413	0.016	0.115
Installation Permit App in lb/MMCF	14.0	14.0	0.6	---	---	---
Installation Permit App in lb/hr	---	---	---	17.1	1.4	4.44

Appendix A: Emissions Calculations
Natural Gas Combustion Only
10 < MM BTU/HR <100
Vaporizer Heating Units

Emission Unit ID's
Vapor 02
Vapor 03
Vapor 04

each @ 72.0 MMBtu/hr

Company Name: Citizen's Gas & Coke Utility - LNG North
Address City IN Zip: 4536 West 86th Street, Indianapolis, IN 46268
CP:
Plt ID: F097-10018-00141
Reviewer: M. Caraher
Date: 12/15/98

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
72.0	630.7

	Pollutant					
	PM	PM10	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	7.6	7.6	0.6	100.0	5.5	84.0
Potential Emissions in pounds/hr	0.5	0.5	0.0	7.2	0.4	6.0
Potential Emission in tons/yr	2.4	2.4	0.2	31.5	1.7	26.5
tons sum of 3 vaporizers	7.2	7.2	0.6	94.6	5.2	79.5
@ 600 hrs	0.2	0.2	0.0	2.2	0.1	1.8

Methodology
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas
Emission Factors for NOx: Uncontrolled = 100, Manufacturer estimate = 100, Low NOx Burner = 50, Flue gas recirculation = 32
Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3 (Supplement D 3/98)
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Fuel Use Limitation corresponding to 600 annual operating hours and for Compliance with 2-3 & 2-8-4 Limits

72 MMBtu / hr x ft^3 / 1000 Btu x 10^6 Btu / MMBtu x MMCF / 10^6 ft^3 = 0.072 MMCF / hr
0.072 MMCF / hr x 600 hrs /yr = 43.2 MMCF / yr Fuel Use limit per rolling 12 consecutive month period
check: 43.2 MMCF / yr x 100 lbs NOx / MMCF x ton / 2000 lbs = 2.2 tons NOx / yr (emfac for Install. Permit = 140 # / MMCF = 3.1 tons / yr)

HAPs - Organics

	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	0.0	0.0	0.0	0.6	0.0
tons sum of 3 vaporizers	0.0	0.0	0.1	1.7	0.0

HAPs - Metals

	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	0.0	0.0	0.0	0.0	0.0
tons sum of 3 vaporizers	0.0	0.0	0.0	0.0	0.0

Methodology is the same as above

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4. (Supplement D 3/98)

326 IAC 6-2-4 Allowable PM limit in ponds per MMBtu = 1.09 / Q^0.26
for Q = 72.0 MMBtu / hr x 3 units = 216.0 MMBtu / hr, Pt = 0.269 pounds per million Btu
emfac of 7.6 # / MMCF = 7.6 # / MMCF x MMCF / 10^6 ft^3 x ft^3 / 1000 Btu x 10^6 Btu / MMBtu = 0.0076 # / MMBtu
emfac is lower than allowable limit

Salt Bath Heater
Fuel Combustion
at 6.54 MMBtu/hr
Emission Unit ID SBH-01

Appendix A: Emissions Calculations
Natural Gas Combustion Only
Used AP-42 emfacs for Commercial Boiler <10 MMBtu/hr
Salt Bath Regeneration fuel combustion

Company Name: Citizen's Gas & Coke Utility - LNG North
Address City IN Zip: Indianapolis, IN 46268
CP:
Plt ID: F097-10018-00141
Reviewer: M. Caraher
Date: 12/15/98

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
6.5	57.3

Pollutant

		PM	PM10	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF		12.0	12.0	0.6	100.0	5.3	21.0
Potential Emission in tons/yr		0.3	0.3	0.0	2.9	0.2	0.6

Methodology

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Emission Factors for NOx: uncontrolled = 100, Low Nox Burner = 17, Flue gas recirculation = 36

Emission Factors for CO: uncontrolled = 21, Low NOx Burner = 27, Flue gas recirculation = ND

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3 (Fifth Edition 1/95), SCC #1-03-006-03

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Waukesha Emergency Generator
1750 kw output
Natural Gas Fired
Emission Unit ID WEG-01

Appendix A: Emissions Calculations
Natural Gas Combustion Only
Internal Combustion Engines - Industrial Reciprocating
> 447 kw

Company Name: Citizen's Gas & Coke Utility - LNG North
Address City IN Zip: 4536 West 86th Street, Indianapolis, IN 46268
CP:
Plt ID: F097-10018-00141
Reviewer: M. Caraher
Date: 12/15/98

output kw rating	equivalent MMBtu rating	equivalent horsepower	resultant MMCF/hr
1750	6.0	2346	0.00597

	PM	PM10	SOx	NOx	VOC	CO
Emission Factor lbs / MMCF	10.0	10.0	0.6	3400.0	82.9	430.0
Potential Emissions lbs/hr	0.1	0.1	0.0	20.3	0.5	2.6
tons/yr @ 500 hrs/yr	0.0	0.0	0.0	5.1	0.1	0.6

Methodology

AP-42 Appendix A Conversion Factor: 1 kilowatt hour = 3410 Btu
AP-42 Appendix A Conversion Factor: 1 horsepower = 2.5435E03 Btu

Equivalent MMBtu rating: output kw rating x 3410 / 1,000,000

Equivalent Horsepower: million Btu / 2.5435E03

resultant MMCF / hr: equivalent MMBtu/hr rating / 1000

Emission Factor (lbs / MMCF): from SCC# 2-02-002-02 Internal Combustion Engines - Industrial Natural Gas Fired Reciprocating Engines

Potential Emissions (lbs / hr): MMCF / hr x lbs / MMCF

Potential Emissions (tons / yr): lbs / hr emissions x 500 operating hrs / yr x ton / 2000 lbs

if limited to: 500 annual operating hours, then 2.98 MMCF/yr is limited annual nat gas throughput

Appendix A: Emissions Calculations
Diesel Fuel Combustion Only
Internal Combustion Engines - Industrial Reciprocating
< 447 kw

Emergency Fire Pump
diesel fuel fired
460 HP
Emission Unit ID EFP-01

Company Name: Citizen's Gas & Coke Utility - LNG North
Address: 4536 West 86th Street, Indianapolis, IN 46268
CP ID:
Plant ID: F097-10018-00141
Reviewer: M. Caraher
Date: 12/15/98

maximum heat input MMBtu / hr	equivalent kilowatt hr	fuel S = 0.4 pecent by weight	equivalent horsepower
1.2	342.5		459

	PM	PM10	SOx	NOx	VOC	CO
Emission Factor lbs / MMBtu	0.3	0.3	0.3	4.4	0.4	1.0
Potential Emissions lbs / hr	0.4	0.4	0.3	5.2	0.4	1.1
tons / yr @ 500 hrs / yr	0.1	0.1	0.1	1.3	0.1	0.3

Methodology

AP-42 Appendix A Conversion Factor: 1 kilowatt hour = 3410 Btu
AP-42 Appendix A Conversion Factor: 1 horsepower = 2.5435E03 Btu

Equivalent kw hr rating: (max heat input MMBtu / hr) / (3410 Btu / kw hr)

Equivalent Horsepower: million Btu / 2.5435E03

Emission Factor (lbs / MMBtu): from AP-42 Table 3.3-2 Emission Factors for Uncontrolled Gasoline and Diesel Industrial Engines

Diesel fuel Btu: 137000 Btu/gal (per AP-42 Appendix A)

Potential Emissions (lbs / hr): emfac x heat input

Potential Emissions (tons / yr): lbs / hr emissions x 500 operating hrs / yr x ton / 2000 lbs

if limited to: 500 annual operating hours, then 4379.6 gal/yr max annual diesel fuel consumption

diesel consumption gal/yr limitation: MMBtu/hr / (Btu/gal / 10^6) * 500 hrs/yr

Fugitive VOC from gas liquefaction
Emission Unit ID 01 - Segment 02

Emission Unit ID - Ethylene Storage Tank

Company Name: **Citizen's Gas & Coke Utility - LNG North**
Address: **4536 West 86th Street, Indianapolis, IN 46268**
CP ID:
Plant ID: **F097-10018-00141**
Reviewer: **M. Caraher**
Date: **12/15/98**

Maximum annual refrigerant losses (per GSD-05, GSD-07, GSD-10(a) & PI-26 **17.6 tons/yr**

	Capacity (gal)	Subpart Kb threshold (gal)
Ethylene Storage Tank	12000	10,568
Pentane Storage Tank	10000	10,568
Butane Storage Tank	3500	10,568
Propane Storage Tank	3500	10,568

notes
40 CFR 60.110b = Subpart Kb = applicable to tanks > 40 m^3 storage capacity
40 m^3 = m^3 x 2.642E02 gallons/m^3 = 10,568 gallons
mixture of refrigerant gases is circulated in a closed loop in a multipass heat exchanger to cool the natural gas feed to liquid

Appendix A: Emissions Calculations
Total PTE - All Facilities

	PM	PM10	SO2	NOx	VOC	CO
Allison Gas Turbine - Emission Unit ID 01	2.3	2.3	0.1	74.9	20.3	19.1
T-Thermal Vaporizer - Emission Unit ID 02	2.4	2.4	0.2	31.5	1.7	26.5
T-Thermal Vaporizer - Emission Unit ID 03	2.4	2.4	0.2	31.5	1.7	26.5
T-Thermal Vaporizer - Emission Unit ID 04	2.4	2.4	0.2	31.5	1.7	26.5
Salt Bath Regeneration - Emission Unit ID SBR-01	0.3	0.3	0.0	2.9	0.2	0.6
Waukesha Emergency Generator - Emission Unit ID WEG-01 (***)	0.0	0.0	0.0	5.1	0.1	0.6
Emergency Fire Pump - Emission Unit ID EFP-01 (***)	0.1	0.1	0.1	1.3	0.1	0.3
total	9.9	9.9	0.8	178.7	25.8	100.1

(***) = at 500 hours per year
shading = insignificant activities

Fugitive Emissions counted in Potential to Emit

Annual fugitive losses estimate from storage, valves, seals, flanges on refrigeration system (makeup losses): 17.6 tons per year

Limited PTE

	PM	PM10	SO2	NOx	VOC	CO
Allison Gas Turbine - Emission Unit ID 01 (*)	1.6	1.6	1.0	83.6	27.6	11.5
T-Thermal Vaporizer - Emission Unit ID 02 (**)	0.1	0.1	0.2	3.3	0.1	0.8
T-Thermal Vaporizer - Emission Unit ID 03 (**)	0.0	0.0	0.0	0.0	0.0	0.0
T-Thermal Vaporizer - Emission Unit ID 04 (**)	0.0	0.0	0.0	0.0	0.0	0.0
Salt Bath Regeneration - Emission Unit ID SBR-01	0.3	0.3	0.0	2.9	0.2	0.6
Waukesha Emergency Generator - Emission Unit ID WEG-01 (***)	0.0	0.0	0.0	5.1	0.1	0.6
Emergency Fire Pump - Emission Unit ID EFP-01 (***)	0.1	0.1	0.1	1.3	0.1	0.3
total	2.1	2.1	1.3	96.2	28.1	13.8

(*) = operation at 5200 hours per year (per Construction Permit of 11/90) & includes fugitives
(**) = ID 02, 03 & 04 are limited to a combined total < 600 hours/yr (per Construction Permit of 11/90)
(***) = at 500 hours per year
shading = insignificant activities

* Risk Management Plan under 40 CFR Part 68 appears to be an applicable requirement because the source appears to store or process > 10000 pounds of ethylene or pentane annually

All Significant Emission Unit ID's

Appendix A: Emissions Calculations
1990 Construction Permit Limiations
1999 FESOP Limitations

Company Name: Citizen's Gas & Coke Utility - LNG North
Address: 4536 West 86th Street, Indianapolis, IN 46268
CP ID:
Plant ID: F097-10018-00141
Reviewer: M. Caraher
Date: 02/06/99

1990 Construction Permit Limitations

Emission Unit ID 01 Allison Gas Turbine

	short term limit	pounds/hr	tons/yr	rule cited / limitation arrived at by	state rule cite
PM		0.62	1.6	mfgrs data / 14 #/MMCF x (38 MMBtu/hr/860 Btu/ft^3) = 0.62 #/hr @ 5200 hrs/yr = 1.6 tpy	326 IAC 2-1-3 (Construction Permits)
S02	0.01 #/MMBtu	0.38	0.99	IAPCB Reg IV-4 (0.01 #/MMBtu) / @ 38 MMBtu/hr = 0.38 #/hr @ 5200 hrs/yr = 0.99 tpy	326 IAC 12 (NSPS) & 326 IAC 2-1-3 (Construction Permits)
NOx	211 ppm @ 15% O2 & on a dry basis	32.15	83.6	NSPS Subpart GG / based on max N content of 23.2%, ppm from GG = 211 ppm or 32.15 #/hr @ 5200 hrs/yr =83.6 tpy	326 IAC 12 (NSPS) & 326 IAC 2-3 < doesn't apply & 326 IAC 2-1-3
VOC(comb)		1.4	3.6	mfgrs data / 1.4 #/hr @ 5200 hrs/yr = 3.6 tpy	326 IAC 2-1-3 (Construction Permits)
VOC(fug)		---	17.6	material balance estimate of approximate actual annual loss	326 IAC 8-1-6 (Local BACT) < doesn't apply & 326 IAC 2-1-3 (Constr Permits)
CO		4.44	11.5	mfgrs data / 4.44 #/hr @ 5200 hrs/yr = 11.5 tpy	326 IAC 2-1-3 (Construction Permits)

Emission Unit ID 02, 03 & 04

	short term limit	pounds/hr	tons/yr	rule cited / limitation arrived at by	state rule cite
PM	0.01 gr / dscf	0.38	0.04	IAPCB II-2 (0.01 gr/dscf) / @ 4464 scfm = 0.38 #/hr @ 200 hrs/yr = 0.04 tons per year for each unit	326 IAC 2-1-3 (Construction Permits)
S02	0.01 # / MMBtu	0.72	0.07	IAPCB Reg IV-4 (0.01 #/MMBtu) / @ 72 MMBtu/hr = 0.72 #/hr @ 200 hrs/yr = 0.07 tons per year for each unit	326 IAC 2-1-3 (Construction Permits)
NOx		11.08	1.11	AP-42 emfacs / @ 140 #/MMCF & 910 Btu/ft^3 = 11.08 #/hr @ 200 hrs/yr = 1.11 tons per year for each unit	326 IAC 2-1-3 (Construction Permits) & 326 IAC 2-3 < doesn't apply
VOC(comb)		0.22	0.02	AP-42 emfacs / @ 2.8 #/MMCF & 910 Btu/ft^3 = 0.22 #/hr @ 200 hrs/yr = 0.02 tons per year for each unit	326 IAC 2-1-3 (Construction Permits)
CO		2.77	0.28	AP-42 emfacs / @ 35 #/MMCF & 910 Btu/ft^3 = 2.77 #/hr @ 200 hrs/yr = 0.28 tons per year for each unit	326 IAC 2-1-3 (Construction Permits)

1999 FESOP Limitations

Emission Unit ID 01 Allison Gas Turbine

	short term limit	pounds/hr	tons/yr	rule cited / limitation arrived at by	state rule cite
PM			1.6	mfgrs data / 14 #/MMCF x (38 MMBtu/hr/860 Btu/ft^3) = 0.62 #/hr @ 5200 hrs/yr = 1.6 tpy	326 IAC 2-1-3 (Construction Permits) & 326 IAC 2-8-4 (Permit Content)
S02	0.015 % @ 15% 02 & on a dry basis		0.99	NSPS Subpart GG & 326 IAC 2-1-3 / @ 5200 hrs/yr = 0.99 tpy	326 IAC 12 (NSPS) & 326 IAC 2-1-3 (Constr Prmts) & 326 IAC 2-8-4 (Prmt Content)
NOx	211 ppm @ 15% O2 & on a dry basis		83.6	NSPS Subpart GG / based on max N content of 23.2%, ppm from GG = 211 ppm or 32.15 #/hr @ 5200 hrs/yr =83.6 tpy	326 IAC 12 (NSPS) & 326 2-1-3 & 326 IAC 2-3 < doesn't apply & 326 IAC 2-8-4
VOC(comb)			3.6	mfgrs data / 1.4 #/hr @ 5200 hrs/yr = 3.6 tpy	326 IAC 2-1-3 (Construction Permits) & 326 IAC 2-8-4 (Permit Content)
VOC(fug)			24.0	material balance estimate of approximate actual annual loss	326 IAC 8-1-6 (Local BACT) & 326 IAC 2-8-4 (Permit Content)
CO			11.5	mfgrs data / 4.44 #/hr @ 5200 hrs/yr = 11.5 tpy	326 IAC 2-1-3 (Construction Permits) & 326 IAC 2-8-4 (Permit Content)

Emission Unit ID 02, 03 & 04 (each)

	short term limit	pounds/hr	tons/yr	rule cited / limitation arrived at by	state rule cite
PM	0.296 # / MMBtu		0.04	326 IAC 6-2-4 (PM Indirect Heating); tpy by 326 IAC 2-1-3 (Construction Permits) & 326 IAC 2-8-4 (Permit Content)	326 IAC 6-2-4 & 326 IAC 2-1-3 (Constr Permits) & 326 IAC 2-8-4 (Prmt Cont)
S02			0.07	326 IAC 2-1-3 (Construction Permits) & 326 IAC 2-8-4 (Permit Content)	326 IAC 2-1-3 (Construction Permits) & 326 IAC 2-8-4 (Permit Content)
NOx			1.11	326 IAC 2-1-3 (Construction Permits), 326 IAC 2-3 (Emissions Offset) & 326 IAC 2-8-4 (Permit Content)	326 IAC 2-3 (Emissions Offset) < doesn't apply & 326 IAC 2-1-3 & 326 IAC 2-8-4
VOC(comb)			0.02	326 IAC 2-1-3 (Construction Permits) & 326 IAC 2-8-4 (Permit Content)	326 IAC 2-1-3 (Construction Permits) & 326 IAC 2-8-4 (Permit Content)
CO			0.28	326 IAC 2-1-3 (Construction Permits) & 326 IAC 2-8-4 (Permit Content)	326 IAC 2-1-3 (Construction Permits) & 326 IAC 2-8-4 (Permit Content)